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Join Your Professional Organizations, C. V. A. and A. V. A.

The California Vocational Association has affiliated itself with the new American Vocational Association and is on its way toward larger fields of endeavor. According to its official statement the C. V. A. is established for the following purposes:

(1) To promote vocational education and to afford opportunities for the presentation and discussion of various problems of vocational education.

(2) To make available the results of experience and work accomplished in the various fields of vocational education, both in this state and other states.

(3) This association shall work in coöperation with other agencies for the advancement of vocational education in the state.

The C. V. A. welcomes to membership not only teachers of agriculture, trades, commercial occupations, and home-making, vocational counselors, teachers of part-time pupils, and rehabilitation workers, but also persons in business and industry who are interested in vocational training.

Meetings of this organization will be held in connection with the meetings of the C. T. A. The president of the California Vocational Association is John Alltucker, head of the vocational department, Exeter High School. The four vice-presidents representing different fields of vocational work are: William C. Morrison, teacher of agriculture, Marysville High School; Nora M. McNamara, teacher of beauty culture, Frank Wiggins Trade School, Los Angeles; Mrs. Rebecca Nason, teacher of commercial work and supervisor of placement of commercial workers, Fresno; Mrs. Cora Erwin, head of the home-economics department, San Jose Part-time School. R. J. Springall, instructor in electrical work in the Sacramento Senior High School, is the secretary-treasurer.

The A. V. A., the successor of the National Society for Vocational Education and the Vocational Association of the Middle West, will hold its first national meeting in Louisville, Kentucky, December 2, 3, and 4. Dr. Edwin

A. Lee, president of this organization, promises an inspiring meeting. Z. M. Smith, secretary of the association, says:

"The American Vocational Association is launching a program of vocational education service which will directly benefit every state in the Union. The quarterly News Bulletin is one phase of this service. This bulletin is mailed to each member of the association. Another phase of the service program is that of assisting states in bringing to state conventions and conferences leaders in special fields of vocational education."

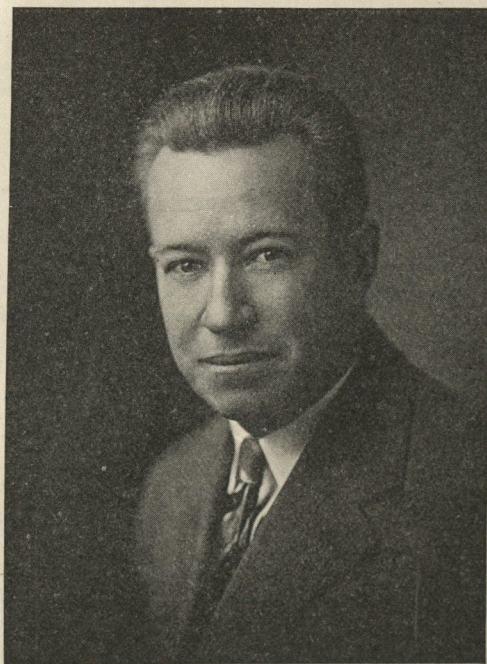
"The South's urgent appeal for service through the association had a direct bearing on the selection of Louisville, Kentucky, as the convention city. Reports from every part of the United States give assurance that the Louisville convention will go down in history as an outstanding contribution to the advancement of a nation-wide vocational education program."

Dr. W. S. Taylor, Dean of the School of Education of the University of Kentucky, says:

"Louisville, with its more than 300,000 people, extends to the vocational education, vocational guidance, and industrial-arts people all over America a cordial invitation to the city on the falls of the Ohio. The Public School System, the Board of trade, the Employers' Association, the Labor Union, the Federation of Women's Clubs, the Retail Merchant Association, and all of Louisville and Kentucky extend to you and to your co-workers an invitation to participate in the first meet-

ing of the American Vocational Association. Begin now to plan your program so that these dates will be free for a visit to the Blue Grass State and to the city that joins the North and South and the East and West. Louisville has the cordiality and hospitality of the Southland, the thrift and industry of the North and East, and the spirit of the West. Louisville and Kentucky are awaiting the opportunity to welcome you."

Fill out the accompanying blank, send it with check, and become a member of both the C. V. A. and the A. V. A.



EDWIN A. LEE
President of the American Vocational Association

Parley of Trade and Industrial Teachers at Huntington Lake

No less than 150 men and women of the state met at Huntington Lake for the conference on trade and industrial education called by the State Board of Education and arranged by J. C. Beswick, state supervisor of trade and industrial education. Teachers, principals, and directors from all parts of the state, from Eureka to San Diego, climbed the difficult but beautiful ascent to Huntington Lake and camped on the shore within the grounds of the summer school of the Fresno State Teachers College. The conference was for the two days of August 9 and 10.

In addition to the classroom and shop teachers, there was a large group of superintendents and principals, and many school departments cooperated by sending, at local expense, a large delegation of teachers from their trade and industrial departments.

S. D. Merk, chairman of the committee on vocational education of the State Board of Education, gave the address of welcome on Monday morning and was followed by Professor Edwin A. Lee, Director of the Division of Vocational Education of the University of California, in an address on "The Challenge of Vocational Education."

The meeting then broke up into conference groups which met and organized preparatory to the discussions of how to meet important problems in various lines. The conference groups were divided according to the responsibilities and problems of the persons attending the con-

ference. L. B. Travers and M. S. Lewis were chairmen for the group of supervisors and heads of departments. B. W. Johnson was chairman for the automechanics; B. E. Mallary for the machinists; G. F. Haller and A. G. Waidelich for the woodworkers and printers; E. E. Ericsen for the general shop and prevocational teachers; M. E. Hurley for the part-time school teachers; V. Kersey for the evening school group; and J. C. Beswick for the superintendents, principals, and directors. Charles R. Allen, educational consultant for the Federal Board for Vocational Education, was kept busy every hour of the day and evening leading conference groups. He was assisted by Louis B. Travers, regional agent for the Federal Board for Vocational Education on the Pacific Coast.

With the exception of two addresses all the meetings were conducted on the conference plan and this scheme seemed to give opportunity for the widest possible exchange of experiences and development of new ideas. Very sincere appreciation of the untiring work of that veteran in conference leadership, Charles R. Allen, was expressed by all groups.

So successful was the entire conference that it is hoped it may become an annual affair, meeting in different parts of the state at the call of the State Board of Education or of the newly formed California Vocational Association which was the outgrowth of this conference. A full account of the association is found on the front page.

The Value of an Objective in Teaching

By BENJAMIN W. JOHNSON,

Assistant Director, Division of Vocational Education, University of California, Southern Branch.

"Why discuss this topic?" I hear you say, "Just as though it were possible for a teacher to teach without an objective!" In spite of this preconceived notion held by most teachers, experience as a teacher, as a supervisor of teachers, and of late years as a trainer of teachers of industrial vocational subjects, has convinced me that very few teachers appreciate the importance of an objective rightly conceived nor understand how to use correctly an objective in teaching.

The usual teaching in all fields of learning is on the *topical* basis. Various subjects are selected from those that have come down to us by tradition with more or less academic success and topics within them are assigned. If, after our efforts which we call teaching, the pupil seems to know something about the subject, we assume that he has been taught.

The topical basis for determining teaching units or content has, of course, decided advantages. It is easy for the teacher to use, and in the tests applied to show how much the pupil knows about the topic the result is satisfactory to the teacher if the pupil can tell or write something upon this topic.

The great disadvantage of the topical method, on the other hand, is that there are no clear standards of achievement set up for either the teacher or pupil except in the limited field of memory and recall; no indication is given of just what sort of ability the learner is expected to

possess as a result of the teaching. This topical statement of teaching is undoubtedly the result of a misconception of what teaching is and what the teacher is really responsible for when he or she teaches.

How Do We Learn?

The learning process, in theory at least, is familiar to us all. The basic principle of good teaching depends upon this learning process which follows the order: attention, curiosity, interest, and desire. A teacher must ask himself, "Did my teaching take the mind of the learner successively through these four attitudes or conditions?" When desire has been kindled then, and only then, is it possible for learning to begin and training to follow.

Stated in another way, according to the most progressive thought there are three main steps in the learning process. First, interest and desire are kindled; the pupil wants something very much indeed. Second, self-activity is now stimulated to the end of satisfying this desire. Impressions are vivid and deep because expression is increasingly active and real. Experience by the pupil is the only means of learning—the teacher is the guide. He gains nothing from another's activity. The third step is self-correction. He must survey what he has accomplished. In the satisfaction of the desire, is the result all that could be secured? Comparison and analysis are the essential requirements in this third stage. This serves as the basis for the next step forward and means that a

keener intelligence has been developed, with a ripening of judgment and a strengthening of the ability to think.

The teaching process, then, is a refinement of the method of carrying out this learning process. Teaching is not imparting anything, neither skill nor knowledge, although both are very necessary in the process of learning as well as in teaching. Teaching is the stimulation of the learner to acquire and to construct for himself. There is no teaching process unless there is at the same time a *thinking operation* induced in the learner.

Teaching, then, is educating and training the learner to think. The evidence to the teacher that this teaching process is going on is a "come-back" on the part of the pupil which indicates that he is thinking, that he is analyzing a problem, listing out the facts, weighing and comparing them, determining ways and means, drawing a conclusion and putting that conclusion to the test, and then finally surveying the results in terms of the solution of his problem.

What Is Thinking?

Every teacher must know exactly what thinking is and the methods used for securing it in the mind of the learner. He must know how to measure such results and thus determine the kind and quality of the thinking done by the learner; and also, he must develop in the learner the habit of thinking and the ability to carry over this habit from the subject in hand to other subjects in which he must do some thinking.

James Harvey Robinson, in his "Mind in the Making," sets forth very simply the various kinds of thinking. As he puts it, there are four stages of the mind's action: First, *revery*, in which we allow our ideas to take their own course, "and this course is determined by our hopes and fears; our spontaneous desires, their fulfillment or frustration; by our likes and dislikes, our loves and hates and resentments." It is our favorite kind of thinking and in such thinking we are the center of such thoughts or the "free association of ideas."

The second stage comes when this revery is broken or interrupted, when some practical decision has to be made. "Shall we take the subway or a bus? Shall we have dinner at seven or half-past?" Such decisions may require a good deal of careful pondering. They are certainly more difficult than revery because it requires us "to make up our minds." He adds further: "A decision, it should be noted, does not necessarily add anything to our knowledge, although we may, of course, seek further information before making it."

A third kind of thinking he designates as *rationalizing*, which is stimulated when anyone questions our beliefs and opinions. It is this third stage of the mind's action that is probably the most dangerous to the acquirement of the ability to do real thinking. Quoting again: "We like to continue to believe what we have been accustomed to accept as true, and the resentment aroused when doubt is cast upon any of our assumptions leads us to seek every manner of excuse for clinging to them. The result is that most of our so-called reasoning consists in finding arguments for going on believing as we already do."

The fourth stage of the mind's action is that of *reasoning*. It differs from the other three stages enumerated and is that type of thinking which leads us to change our minds. Robinson calls this *creative thought*. "This kind

of meditation begets knowledge, and knowledge is really creative in as much as it makes things look different from what they seemed before, and may indeed work for their reconstruction." This last stage is that power of the mind to analyze the problems that confront it, determine without prejudice what are the facts, their meaning, to weigh and consider them, to arrive at a conclusion and then to put that conclusion into action. This power of analysis, as the author states, is man's latest and supreme accomplishment; it is this alone that has made his mind grow.

Dr. Harry B. Kitson, in his "How to Use Your Mind," expresses the same conception a little differently. He states that the mind is thinking when the following sequence of impressions is followed: First, the recognition of a problem to be solved. Second, a determined intention on the part of the individual to solve that problem, and consequently to know what are the facts necessary for its solution. When these are determined and selected, he reaches the conclusion: "therefore this must be the answer to the problem." Third, the mind now attacks the problem in the light of this conclusion, notes the effects and determines whether the problem is solved, how it is solved and what to do next time. This mental power so much desired by us all requires the ability to analyze, to compare, to draw conclusions, and to make application and note the consequences, and above all, to have the courage to face such consequences.

Teaching is directing the learner in the solution of problems he desires to solve. It is the securing, on the part of the learner, of a distinct and definite ability. Teaching means the setting of problems for the learner to solve, in the solving of which he acquires information, knowledge, skills, and right attitudes toward his work and his relationship with others, the whole flowing out into positive concrete abilities to think and to do.

Thinking is, no doubt, the crowning achievement in the evolution of the race. It is an ability that may be developed by skillful teaching. Moreover, there is a distinct carry-over of thinking habits. This idea is ably expressed in "Vocational Education in a Democracy" by Prosser and Allen. They state: "There is undoubtedly some carry-over from one field of training to another, not of powers or general faculties or intelligences, but of what might be called tendencies, practices, methods, habits—call them what you will—of using resourceful and sound thinking procedures and dealing with facts to meet situations." In short, habits of thinking developed by right teaching can be carried over from one field to another. If this is true we, as teachers, have a double obligation now laid upon us; first, that we so teach that we develop in our students this power of the creative mind in the subjects and divisions of knowledge for which we are immediately responsible; and second, for having our students understand what this thinking process is they are learning to use and how all fields of experience and knowledge are open only to those who have this supreme ability to think.

Teaching, then, is the setting of problems for the learner to solve. These problems if possible should be vital and real, not academic and subjective, calling only for mental gymnastics. Such problems should be objective and within the desires of the learner.

What Is an Objective?

We are now ready to discuss the objective of the teacher. What is an objective? Does it contribute something more than the usual statement of "aim or purpose" to teaching? It is so interpreted here. Where an instructional unit has been decided upon and we express it in terms of some aim or purpose, the expression used is almost always subjective and is usually without sharp definition of just what is wanted. The aims set up by most teachers when preparing a unit of instruction has practically no more significance than that of the weather-vane on the top of the steeple which simply points which way the wind blows. The teacher knows that his class is going in the general direction of his aim, or at least he thinks so, but his aim lacks a statement of a standard to measure progress. *Purpose*, likewise, is a statement of attitude rather than accomplishment. Both words, *aim* and *purpose*, as commonly used, lack definition. The emphasis is upon the subject to be taught when it should always be upon the learner and what ability we expect him to acquire because of our teaching.

Objective, then, is a sharply defined goal in terms of the ability to be attained by the learner. The teacher who plans to teach by the use of an objective makes the sharp distinction between his own objective, which he may have for this lesson, and the objective that he has for each learner in the group. With this latter objective clearly stated he can proceed upon a plan of action for himself to have the learners reach the desired objective.

For example, take the simple problem of how to sew on a button. The topic here is "sewing on buttons." Expressed in the terms of *aim* or *purpose* it would be "to teach how to sew on a button"; the teacher will show how it should be done and the pupil will learn how to do it. If stated as an objective it should read as follows: "To develop ability in the learner to use the needle and thread correctly, to select the right materials, to follow the right steps and operations, to use the right kind of stitches, to understand the quality of the materials, the value of colors, and the effects to be secured." An indirect objective would be to have the pupil appreciate nice work and high standards of accomplishment. This is a very simple job or problem. Why bother to write out an objective when the aim or purpose above stated will serve? Will it? Compare the two and the difference and significance of the objective statement is evident. It sets up what sort of abilities are necessary in skills, knowledge, judgments, and attitudes to do this particular job, with the attention focused upon the learner and the experiences he must undergo to reach this objective.

With a more complex problem the objective statement is imperative to insure clearness and understanding of the kind of abilities necessary to solve the problem. Further examples might be given of the use of objectives in teaching. All of the trade analyses recently made by the Division of Vocational Education in carpentry, cabinet-making, automechanics, and plastering, set up clearly objectives for every stage of progress of the learner who is mastering any one of the trades. "How to Make a Curriculum" by Franklin Bobbett is an extended discussion of the determination of objectives for all courses of study.

Kind of Objectives

In many units of instruction it is desirable to set up more than one objective for the particular unit. The first we would call the main objective which describes in definite terms the sort of ability we expect to develop in the learner as the result of this teaching unit. A subsidiary or indirect objective is usually a statement of the attitude we expect the particular teaching unit to induce in the learner. For example: in one of the first units in the teacher-training instructional course, the objective set up is to develop in the members of the class the ability to analyze a particular job in their trades and to understand what is necessary to do in such a procedure, what classification headings are desirable, and what is their significance. The indirect objective is to develop in them the appreciation of the difficulties involved and that such analysis is necessary for them to carry out for every job they expect to teach.

In setting up an objective the teacher must picture as sharply as possible just what ability the pupil he is training should have and what he should be able to do at any particular stage in his progress. The teacher must also state clearly the kind of knowledge necessary for this ability; that is, what the learner should understand, including the whys and wherefores; and what attitudes he should be able to express as a result of the teaching of this unit of instruction.

How to Attain an Objective

First, with an objective clearly in view, the teacher makes a clear analysis of the ways and means for attaining this objective. Second, he makes a comparison of these ways and determines which are best, after considering what will be the consequences of this, that, or the other way or means. Third, a conclusion is finally reached as a result of this comparison. Fourth, the conclusion reached is now applied and results are noted as a guide for the next step forward.

This method thus assures a habit formation that realizes all three of the general principles of learning: First, a worthy desire kindled, a want to be satisfied; second, self-activity to attain this desire; third, a self-correction for future values.

VOCATIONAL SURVEYS AFOOT

Oakland.—In preparation for planning a trade school which will meet the needs of Oakland and its growing industrial and transportation needs, a vocational survey is to be made. The survey will be conducted under the direction of L. B. Travers who has just resigned from his position on the trade and industrial education staff of the Federal Board for Vocational Education as regional agent for the Pacific Coast States to accept this position.

Crockett.—With the new high school building of the John Swett Union High School district nearing completion, George F. Haller, formerly head of the department of vocational education of the Berkeley High School, has accepted a similar position in Crockett to plan the courses which are to be offered in the new building. This semester Mr. Haller is making a study of the trades used in the smelting, brick, sugar, and oil-refining industries of that district to determine the nature and extent of the training required.

Our Homes: Their Growth and Development

By ALICE S. BEARDSLEY

The outline presented below was used in tying up home relations to the economic, social, and educational problems of the day in classes consisting of both boys and girls. The course was given in small, rural schools one half-day a week to pupils of all grades, with limited equipment and few books for reference. The activities and the outline of the topics discussed with a few of the lessons developed are given here.

MAJOR OBJECTIVES OF THE COURSE

- To lead from a general curiosity about homes in general to a broader interest and understanding of subjects vitally related to, but seldom considered in connection with, the study of homes.
- To develop specific knowledge around certain units related to home life.
- To arouse an interest in, and development of, good habits of observation, social intercourse, and reading which will furnish further information and skill about those social, civic, and educational phases.

SPECIFIC AIMS

- To furnish certain knowledge about ethical, social, and economic phases of home life which will give a broader understanding of how our homes came to be.
- To bring out the idea of our inter-dependence as related to our close and far neighbors, and through the knowledge thus gained develop a sense of coöperation and understanding that will be civic, national, and inter-national in its scope.
- To develop a sense of appreciation growing out of such knowledge gained.
- To influence directly and indirectly the young people to the end that they may see and assume their own responsibility in the matter of making their own homes units that will contribute a share to civic, economic, and social advancement.
- To study the relation of the home to such points of law and civic questions as directly concern its operation.
- To show how the home is served by public and private utilities, as well as by institutions such as the schools.
- To acquire knowledge concerning phases of home operation such as lighting, heating, ventilation, and sanitation which serve to make an efficient, economic, and social unit of a well-kept home.

ACTIVITIES

The activities which may be carried on to help in the development of the topics set forth in this outline are varied and must, of necessity, grow more or less out of the environment surrounding the group.

The activities set down are some that were carried out under conditions similar to the following: Little or no school equipment. Such materials as were needed were furnished by the children. Resources very limited and all work was done with a minimum expenditure.

Under these conditions it was found profitable to supplement the hand work and the discussions by constructing

homemaking books. The books made by the pupils illustrated the development of the home through the different periods of man's progress, and covered such topics as:

Types of homes	Labor-saving devices
Furnishing the home	Recreation
Heating	Home management
Lighting	Budgeting
Sanitation	Cooking
Personal	Sewing
Household	Transportation, food, clothing, etc.

MAJOR OUTLINE

- A. History of homes
 1. Primitive peoples
 - Tree dwellers
 - Lake dwellers
 - Cave dwellers
 2. Types of homes
 - Primitive: tree, lake, and cave
 - Types growing out of climatic and topographic conditions
 - Modern homes
 - Local homes
 3. Manner of obtaining food, shelter, and clothing
 4. Discovery of fire
 5. Beginning of group life made possible by fire
 6. Growth of group life
 - Clan (family)
 - Tribe
 - Community
 - Village
 - Nation
 7. Material developments resulting from group life
 - Weaving
 - basketry
 - clothing
 - Crude furniture
 - Weapons
 - Tools
 - Improved shelter
 - Cooking
 8. Social growth
 - Habits of coöperation, courtesy, helpfulness, loyalty to group, etc.
 9. Economic growth
 - Coöperative use of supplies
 - Property rights
 - Child protection
 10. Civic growth
 - Law
 - Leadership
 - Tribal and clan relations
 11. Aesthetic development
 - Art
 - Music
 - Rhythm and dancing
 - Religion
- B. The building of a home
 1. Selecting a site
 - Location, yard, view, air, light, trees, proximity to schools, churches, stores, work, libraries, street-cars, movies, etc.
 2. Choice of materials
 - Cost
 - Suitability
 - Availability
 - Taste

3. Furnishings
 - Purchasing new furniture
 - Possibilities of utilizing old
 - Furniture to be used
 - Sets for dining-room, living-room, and bedrooms
 - Rugs
 - Curtains
 - Bedding
 - China
 - Cooking utensils
 - Silver
4. Questions to be considered in purchasing or renting a home: (related to health and comfort)
 - Ventilation
 - Sanitation
 - Heating
- C. Economic questions related to the home
 1. Taxes
 - Personal
 - Real
 - Property
 - Auto
 - Luxury
 2. Savings
 - Savings accounts
 - Building and loan
 - Small government bonds
 3. Insurance
 - Life, fire
- D. Social relations in home
 1. Relation of family members to each other
 2. Place of loyalty, courtesy, honesty, helpfulness, etc.
- E. Home relation to community, state and nation
 1. Benefits received from coöperation.
 2. Coöperation due to community, state, and government
 3. Protection
 - Police
 - Fire
 - Property
 - Personal
 - Health
 4. Roads
 5. Schools
 6. Parks
 7. Playgrounds
- F. How the home is served by utilities, public and private
 1. Telephone, telegraph, and cable
 2. Gas and electricity
 3. Railroads, street-cars, and bus lines
 4. Sewage
 5. Street lamps
 6. Ferries
 7. Bridges
- G. Relation of home and school
 1. How the schools are supported
 2. How the schools can serve the interests of young people
 3. How young people can coöperate with the schools
- H. Advancement in the home
 1. Things which contribute to advancement
 - Art, pictures, decoration, etc.
 - Music
 - Victrola
 - Radio
 - Musical instruments
 - Singing
 - Literature
 - Magazines, books, newspapers
 - Social intercourse
 - Hobbies, skills
 - Mechanical and labor-saving devices and their share in making advancement possible by adding to leisure time.
 2. Attitudes which contribute to advancement

- I. Good times in the home and through the home
 1. Picnics, swimming, parties
 2. How regulated to preserve harmonious relations within and without the home
 3. How they may be enjoyed in a safe and sane way
- J. How homes are dependent on coöperation for maintenance
 1. Sources of raw materials
 2. Transporting
 3. Manufacturing
 4. Distributing

SUGGESTED LESSONS

Homes

- Did homes grow or did they just "happen"?
- Did people always have furniture, pictures, books, etc.?
- Suppose something happened to take away from you everything that you have in the way of buildings, furnishings, weapons, tools. What would you do for shelter? Food? Clothing? Protection from wild animals?
- Do you think such a condition would cause people to live in groups or alone?
- People lived without all man-made articles. It was fire that made it possible for people to live on the ground and in groups. Can you see why? Can you think of any way people might have found out about fire?
- How did group life widen the possibilities of achievement? How did it increase the problems people had to solve? What material things developed from group life? (Weaving, pottery, tool-making, weapons)
- What arts were developed? (Decorative art, music, stories, dancing)
- What might have caused the beginning of religion?
- When people began to live in groups why did rules of conduct become necessary?
- What do we call rules of conduct today that have taken accepted form and have been recorded?
- What influences caused these early groups to grow into the towns, cities, states, and governments that we have today?
- How do these early beginnings help us a little to interpret our economic, social, and civic life as we know it?

Primitive Homes

- If you had nothing but your two hands and such things as grow around you, what sort of a house could you make (granting the absence of tools)?
- On what would you be dependent for the choice of materials? Describe several types of primitive homes.
- How are homes influenced by climatic and geographic conditions and by the materials available?
- Name some of the materials used for homes.
- Where are there still "primitive" homes?
- To what extent do people of the Congo, for example, show talent along the lines of government, invention, music, art?
- Do they have any great weight in the affairs of the day? Does the attainment of a certain degree of learning or skill either in literature, music, art, mechanics, and trade, serve as a measure of a man's or a woman's importance in the world today?
- In other words, does the ability to "do" or to understand, and discuss the problems that affect us indicate a measure of our development?

Modern Homes

Why are people now less dependent on their surroundings for the types of homes in which they live?
 What kinds of houses are found in your community?
 What accounts for this?
 What materials went into them?
 How many came from your own locality?
 How many had to be brought in?
 How did they come? By rail or by water?
 How many are used in their raw state?
 Which ones require treatment and skill to prepare? Which require the least and which require the most preparation?
 Try to make a list of the people who shared in making your home possible.
 Make a list of the trades and skills which were necessary to build your home.

Homes as an Index of Character

Look at the homes in your community. Select one and describe the kind of family you think lives inside.
 Do you think back yards tell anything?
 If you were a stranger looking at your own back yard what do you think it would tell you about yourself?
 Do you think houses and yards and furniture and the way they are kept tell something about the ambitions and hopes, and the habits of the people to whom they belong.
 Suppose you were set to judge and grade the houses in your block:
 What points would you set up as desirable?
 What points would you set up as undesirable?
 What responsibilities does the householder bear in the matter of civic pride?
 Look at your home as though you had been away from it for several months. Can you think of any way in which you might improve it with a little effort?
 Is it worth the effort? Why?

Essentials of a Good House

Describe a house planned just as you would like to have it. Since such a house is impossible for most of us, let us think where we would begin to cut down.
 What things are to be taken into consideration when we plan a house?
 Look at the following list and mark the two or three things which you think are of first importance:
 Location, yard, view, air, light, trees, proximity to schools, churches, libraries, work, movies.
 Could you dispense with any of them? Which ones?
 Which should be had at any cost?
 Here are some items to be considered in the planning of a house:
 Cost, materials, heating, lighting, sanitation.
 Name some others.
 (Lesson could be followed by taking any one of these topics and indicating its relation to health.)

Coöperative Production and Homes

The cave man had to forage for his own food and clothing. Only back as far as the days of the Civil War was each home largely dependent on its own ingenuity for the necessities of life.
 This condition is largely changed now by the extensive use of machinery.

Here are some of the processes, formerly done in the home, which are now done outside:

Baking, laundry, cleaning (clothing, rugs, etc.), weaving and manufacture of garments, weaving of household linens, towels, tablecloths, etc., furniture making, meat packing, canning of foods.

Name some others.

Name some of the advantages in having this work done outside the home.

Name some disadvantages.

How Homes are Served by Utilities, Private and Public

Name some of the public utilities which serve our homes.
 How are these utilities financed?
 Can anyone start a bus line or a car company?
 What is necessary first?
 Why does the city grant a franchise?
 Can these companies set their own rates?
 Could we have the conveniences without the companies?
 To what extent do we owe them coöperation?
 Is it all right to hook up your radio behind the meter? To the wires outside the house? Is there a regulation to that effect or is it left to your own sense of fair play?

Schools

Would you choose to live in a country that had no schools?
 Why should we have schools?
 Who benefits by the schools?
 Who pays for the schools?
 Do the people in your community pay for all the schooling of the children of the community?
 Who does? Do you see any right reason for this? Is it fair to all concerned?
 Who should go to school?
 What do you think should be the purpose of schools?
 Are schools fulfilling that purpose?
 If you are not getting what you think you should from the schools do you think you should have a right to say so?
 Have you good arguments to support your claim?
 Could the school do more to help you?
 If the school management is willing to try to adapt itself to your needs how can you coöperate?
 The public is paying large sums of money to help you better yourself. It is hard to meet the needs in every case. Everyone wants to help you. Make some definite suggestions of the things that you think would help you.
 If there is anything that you find especially disagreeable make a statement to that effect and if you think of a better thing in its place say what it is.
 What is the connection between schools and homes?

Taxes

Why do we have taxes?
 Do taxes concern you in your home?
 What taxes touch your home?
 Do you think it is right to tax a piano, furniture, a house, a dog, an automobile?
 What is done with the money collected in taxes?
 Who pays taxes?
 Who evaluates the property?
 Who should pay the greater tax—the man who owns a lot and builds on it or the one who lets it grow up in weeds? Who does pay the greater tax?

(Concluded on page 13)

Vocational Education News Notes

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Part-time Education Homemaking Education
Trade and Industrial Education Agriculture Education

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DR. LEE GIVES ADDRESSES IN PENNSYLVANIA

Dr. Edwin A. Lee, director of the Division of Vocational Education of the University of California and president of the American Vocational Association, spent the latter part of August attending a session of the Four-State Vocational Conference at West Chester, Pennsylvania. Directors of vocational schools and teachers of agriculture, trades, and home economics, and teachers in continuation schools from the four states of Delaware, Maryland, New Jersey, and Pennsylvania met for a four-day conference at the West Chester State Normal School.

Dr. Lee made a number of addresses at the conference, as did Dr. David Snedden, professor of education, Teachers College, Columbia University, Dr. William S. Taylor, dean of education, University of Kentucky, state superintendents of schools, directors of vocational education, and regional agents from the Federal Board for Vocational Education. The Four-State Vocational Conference is arranged by a committee composed of the four state directors.

Returning from West Chester Dr. Lee stopped in Louisville, Kentucky, to make arrangements with the local committee for the December meeting of the American Vocational Association. This meeting is scheduled for December 2, 3, and 4.

STAFF CHANGES IN THE DIVISION OF VOCATIONAL EDUCATION

Frederick L. Griffin, who was last year acting director of the Division of Vocational Education at the University of California, is this year on sabbatical leave. He is spending the time at Cornell University. Mr. Griffin will be missed by the agriculture teachers of the state this winter. He is making a study while in Cornell of some of the problems in agriculture education for the special work which he intends to undertake upon his return.

Ralph N. Brown, who was research assistant in agriculture education in the Division of Vocational Education in the University of California for two years, received his M.A. during the summer and has taken a position at King City. Mr. Brown is deeply interested in part-time and evening-school instruction in agriculture and much is expected in this line from his work in King City.

Lee Durham, a graduate of Oregon Agricultural College, who has been instructor in agriculture and physical education at Hemet, has the agriculture education research position this year. He is making a study of the records and reports used by the various states in administering and supervising the state vocational agriculture program. He will also prepare some material which is a result of his own teaching experience on instruction in related subjects for agriculture classes through the project method.

Continuing a study of the reasons for school mortality begun last spring, Miss Julia Smith holds the research position in the Research and Service Center of the Division of Vocational Education this fall while completing her master's thesis. Miss Smith is a graduate of the University of California and later completed the course in social service administration in the same institution.

MRS. PHILLIPS GOES TO LOS ANGELES

Mrs. Helen B. Phillips, who was for several years with the Research and Service Center of the Division of Vocational Education of the University of California and was later assistant to Dean Kemp in the School of Education, has gone to Los Angeles as registrar in the Frank Wiggins Trade School. Mrs. Phillips has many friends in part-time and vocational education and throughout the whole field of general education who will miss her from Haviland Hall.

Vocational Education Courses

Summer Session, 1926

In many ways the two summer sessions of the University of California in 1926 were the most satisfactory six weeks experienced by the Division of Vocational Education in recent years. The total enrollments were larger than at previous sessions, indicating an increased interest, which was borne out by the enthusiasm which continued consistently throughout the six weeks.

The University was particularly privileged in having William J. Bogan, assistant superintendent of schools of Chicago, as its leading visitor in vocational education in Berkeley. Dr. Bogan, who was for many years the principal of Lane Technical High School in Chicago and who is now in charge of all secondary schools in the same city, offered two courses: Vocational Education, in which there was an enrollment of forty; and Organization and Administration of Vocational High Schools, a specialized course which enrolled nineteen students.

Edwin A. Lee, director of the Division of Vocational Education, who returned to California from a year's leave of absence at Columbia University in time to teach in the summer session, offered for the first time in Berkeley a course in Vocational Guidance. A gratifying enrollment of ninety-four students indicated that such a course met a real need. His seminar in Vocational Education was attended by twelve graduate students, all of whom were working on theses in vocational education.

In Los Angeles Howard A. Campion, principal of the Frank Wiggins Trade School, gave the general course in Vocational Education and Lewis A. Maverick offered the course in Vocational Guidance.

Part-time Education

Courses in Part-time Education were also offered in both Berkeley and Los Angeles. Vierling Kersey, assistant superintendent of schools in Los Angeles, and Howard A. Campion, formerly director of the Stockton Part-time School, gave the courses in Part-time Education and Curriculum Construction, respectively. In the course in Part-time Education there were sixteen enrolled, while nine were enrolled in the class in Curriculum Construction.

In Berkeley the same two courses were given by Emily G. Palmer and Irvin S. Noall. Mr. Noall, who is state supervisor of trade and industrial education in Utah, is considered more as a permanent member of the summer-session faculty than as a visitor, as this was his third summer on the staff. Sixteen students were enrolled in the course entitled Part-time Education and twelve were in the class in Curriculum Construction. These classes were composed of teachers who were already in part-time schools, or who were preparing to enter this field, social workers, deans of women, and teachers in various kinds of vocational schools.

Trade and Industrial Teacher Training

The courses of instruction for training trade and industrial teachers attracted, as in past years, a most enthusiastic group of Smith-Hughes workers in both Berkeley and Los Angeles. Under the leadership of Benjamin E. Mallary and Melvin S. Lewis, a total of forty-two students in Berkeley concentrated into six weeks a full program of studies and numerous extra-curricular activities.

The extra-curricular activities which have become so important a part of the summer-session training of the vocational teachers in Berkeley were carried out more successfully than ever this summer. The trainees played a large part in the many activities and in some instances carried out the entire program. The men's "steak bake," the "Haviland Hall chest tag day," the women's picnic, the class banquet and graduating exercises, the freshman banquet, the "no-prof" seminars, visits to industrial plants, luncheons, and assemblies were among their activities. The class made and presented to the Education Department for use in the recreation room two tables and a large floor lamp.

For the first time the annual class banquet and the graduating exercises of the teachers of trade and industrial subjects who have been studying in Berkeley were held in July instead of in May. The change in date insured a much larger attendance and was a successful close to the study and social activities of the summer session.

Fifty-nine students, seven of whom were women, received diplomas from Dean Baldwin M. Woods, certifying that they had completed successfully twelve units of the teacher-training course. At the present time fifty-one of these are teaching. Dr. W. J. Bogan presided at the closing banquet, and Dr. Edwin A. Lee and John C. Beswick, state supervisor of trade and industrial education, spoke at the graduating exercises, held immediately after the banquet, in the Memorial Room of Stephens Union.

Benjamin W. Johnson, assistant director of the Division of Vocational Education at the Southern Branch, had charge of the training of this group of trade experts, with his assistants Lynn E. Stockwell and Leslie G. Stier, assistant director of vocational education in Los Angeles. Added to the staff for the summer was F. Dean Bradley, state director of vocational education in Nevada. Mr. Bradley gave two courses, Civic and Employment Relations and Supplemental Subjects.

In Los Angeles there was a very large group of men and women who came for teacher training. The total enrollment for the group last year was eighty-six; this year it was ninety-three. Forty-six of these comprised the group taking the first half of the work and forty-seven were completing the course. Only two of the second-year group are not teaching; these are teachers of dressmaking. Over half of the first-year group were already teaching and thirty-three of the forty-six are now teaching.

A new feature in connection with the courses as given this year proved very successful. Arrangements were made for the teachers in fourteen different trades or occupations to meet together in informal conferences. Each student had to submit, as part of his requirement for completing the course, a complete analysis of their trade in a course of study book or in charts. They were advised to take advantage of their meeting together to obtain such assistance as the staff instructors could give them in working out the material for this analysis. Where the number admitted, a chairman was chosen and regular meetings were held throughout the summer session.

The courses in vocational education for teachers of agriculture were given in Davis this year. A summary of the work there will be found on another page.

Local Supervisors Appointed

According to a recently stated policy of the Federal Board for Vocational Education the various states are being encouraged to make greater efforts toward the improvement of vocational teachers who are already in service. This is considered by the Board as the most important immediate problem in the field of teacher training. To encourage this activity, the Board has extended the use of teacher-training funds for reimbursement of salaries of qualified local supervisors of agriculture, trade, home-economics, and industrial subjects under certain specified conditions.

In line with this policy four local supervisors of trade and industrial education and one local supervisor of agricultural education have been appointed in the state. Frank Cushman, chief of the trade and industrial education service of the Federal Board for Vocational Education, is the local supervisor in Los Angeles. A. R. Nichols, who was state supervisor and teacher trainer in trade and industrial education in Oregon, has accepted the position of local supervisor in San Jose. L. B. Travers, regional supervisor of trade and industrial education for the Federal Board for Vocational Education over the Pacific Coast States, has just resigned to accept the local supervisorship in Oakland.

In the San Joaquin Valley Edward Everett, who was head of the agricultural department of the Santa Rosa High School and past president of the state association of agriculture teachers, is to be local supervisor of agricultural education with headquarters in Fresno. Mr. Everett is also on the staff of the Fresno State Teachers' College. In Fresno city, Lynn E. Stockwell, who has been assistant supervisor of classes for the training of trade and industrial teachers at the Southern Branch of the University and associated with Benjamin W. Johnson, has been appointed local supervisor of vocational education. Mr. Stockwell came to California from the University of Minnesota.

The four communities which are coöperating in this plan of training teachers in service have been particularly fortunate in their selection of men with wide experience in the training of trade and industrial teachers and who are outstanding men in their field.

Job Finding a School Function

In a recent survey of fifty-four schools of the state it was found that every one had some kind of placement program. In most cases the placement was done through a bureau established in the part-time school. It is evident that the placement of its product has finally been recognized as the responsibility of the school system.

Berkeley, Chico, Eureka, Huntington Park, Long Beach, Los Angeles, Oakland, Sacramento, San Jose, Santa Rosa, Stockton, and several other cities, for a number of years, have had successful organizations for the placement of their young workers.

Berkeley.—The Berkeley Junior Employment Service with coöordinator Donald Biery in charge has been open for a half day throughout the entire vacation period. Several hundred applications for employment were filed during the

summer months. Those registering ranged in age from 14 to 21 years, and could be roughly classified under the following heads:

1. Those who had just graduated from high school and desired steady employment.
2. High school students, part-time students, and junior high school students, who desired employment just for the vacation period.
3. Part-time students who desired steady employment.
4. Persons 18 to 21 years of age who were out of school and desired steady employment.

An active campaign was carried on to aid in securing positions. This was done with the assistance of an advisory committee composed of one member from each service and business club in Berkeley. This committee met and organized a schedule of speakers to appear before all of the service and business clubs. The Chamber of Commerce coöperated to the extent of enclosing literature regarding the placement bureau to all its members. The placement bureau sent out several letters to all business houses in the Bay region, and also to all employers who had previously requested help from the placement bureau. The director in charge of the placement bureau made personal calls on various employment managers of the larger industries. Newspaper articles and pictures of students at work were published in order to keep the placement work before the public.

While some of the younger boys and girls were not placed, the older and more capable students were gradually marketed. In fact, the placement bureau ended at the beginning of the new school term with more requests for help than it could fill. The placement bureau was not merely trying to find employment for each applicant, but was endeavoring to place each applicant in a position where he or she could best serve. Little difficulty was experienced in finding employment for those who were really capable and well-trained. However, a large surplus of girls trained in commercial work could not be placed.

Next year a more thorough and intensive effort will be made by the placement bureau. This will include a system of high school and junior high school records to aid the placement bureau in selecting applicants for specific positions. In this way the placement bureau will be better able to aid employers and young workers.

Fresno.—The boys and girls of Fresno will this year have the assistance of Mrs. Rebecca Nason in securing part-time and full-time employment. Mrs. Nason made an enviable reputation for herself in Eureka during the last few years through her success in placing and training boys and girls for commercial work of all kinds.

Los Angeles.—To the staff of the Frank Wiggins Trade School has been added a coordinator and director of placement for women. Miss Hazel L. Moore, who has been appointed to this position, was employment manager and personnel director of a large hosiery mill in the middle west. For the trade school she will have the placement of milliners, dressmakers, costume designers, power-machine operators, beauty parlor operators, and interior decorators.

Oakland.—In response to a request from employers, the junior placement bureaus are open twelve months of the year. The Oakland Junior Employment Service, between the closing of school in June and its opening in August, placed 151 boys and girls. Most of these were permanent

placements. There was also opportunity for the Service to become better acquainted with the employers of Oakland during the summer weeks. A number of employers called at the Bureau and the coordinators took the opportunity to make many follow-up visits to see that the placement of the boys and girls had been satisfactory to everyone concerned.

San Francisco.—In line with this forward step, San Francisco has reorganized its placement work so that all junior placement shall be done under one bureau. This bureau is located in the new Part-time High School building. The secretary in charge is Miss Ruth Turner, who is a graduate of the University of California and of the Prince School for Store Service in Boston. Miss Turner has had corporation experience as an employment manager and was last year a member of the faculty of the Sacramento Part-time School. She has had excellent preparation for this important work in San Francisco.

Sort'em and Pack'em

By MARTIN T. THORSTENSON

The agricultural department of the Watsonville Union High School is congratulating itself with the close of a very successful evening-school class in the commercial sorting and packing of apples. This is a new and unique type of instruction to be undertaken by teachers of high school vocational agriculture, and Watsonville may claim first honors in its introduction. At Sebastopol, California, instruction of a similar nature is given, but it is handled by the local Apple Growers' Coöperative Organization.

The apple sorting and packing school of the Watsonville High School agriculture department opened for the first time, last year, at the beginning of the apple-packing season in the Pajaro Valley. The program for the class was planned by A. G. Rinn, head of the agriculture department, who had charge of the first year's class, this year's class having been under the supervision of the writer.

For several seasons, prior to last year, the Watsonville apple packers and shippers, who had been dissatisfied with having chiefly to depend upon a class of "floating" workers, indicated a desire to secure a higher class of local sorters and packers upon whom they could rely for the output of each season's pack. Packers and shippers wish to employ, as far as possible, the same help each packing season. Only by this method can they assure themselves of maintaining the standardized pack which is required by fruit and vegetable standardization regulations of the State Department of Agriculture. Then, too, the local help assures them a sufficient quota of sorters and packers to make shipments on time. This last point is frequently a matter of serious consideration.

For the first two weeks, last year, school was held in the agriculture department building, where packing tables and stands were especially constructed for the purpose. It was found desirable, however, to complete the class program on a commercial grading machine. Consequently, the last week of instruction was given in a local packing house. Based on the results of last year's method, the course for this year was given in a local packing house where adequate packing and sorting facilities, as well as supplies of orchard-run apples for practice work, were available.

At the completion of the course this season, a rigid examination was given to those in the class who wished to apply for papers certifying that they had had instruction and practice in the commercial sorting, packing, and grading of apples, and who, therefore, were capable of putting up a commercially acceptable pack in a reasonable time.

The period of instruction, this season, was of two weeks duration, the class meeting from 7:30 to 9:30 each evening of the school day. The enrollment averaged thirty-four pupils per evening and by the end of the course practically one-half of those enrolled had secured employment with packers and shippers in the Pajaro Valley. Only one pupil of this number had attempted to do commercial packing prior to the present season.

The interest and coöperation of the local packing and shipping firms were shown by the donations of fruit and wrapping paper for practice work, and by the visits to the school while the class was in session. An annual apple sorting and packing school is now assured Watsonville and its vicinity.

Summer Courses for Agriculture Teachers

The series of courses for teachers of agriculture and farm mechanics offered at the Davis Branch of the College of Agriculture proved highly satisfactory. The technical courses were organized on a three-weeks basis; one-half of each day for the three weeks was devoted to each class. The classes in education were, of course, continued through the full six-weeks period, one hour per day each, in order to meet university credit requirements.

Seventy men and one woman were enrolled in the various courses offered. The one woman was Miss Myrtle Johns, secretary to the director, W. L. Howard, who enrolled for the courses in school law and vocational education. In addition to the formal classwork there were some social activities. At the end of each three-weeks period a committee of students planned and staged successful "smokers" which were both helpful and entertaining.

Special classes for the training of teachers of agriculture will be held at Berkeley in 1927. These classes hereafter, will probably alternate between the two centers.

The classes in Davis with the name of the instructor and the enrollment in each class are given below:

First three-weeks period

Title of course	Name of instructor	Enrollment
Livestock management	Mr. Hughes	17
Field crop production	Mr. Gilmore	9
Judging dairy products	Messrs. Turnbow and Nelson	19
Farm pumping machinery	Mr. Stirnaman	19

Second three-weeks period

Title of course	Name of instructor	Enrollment
Poultry management	Mr. Lloyd	16
Deciduous fruit production	Mr. Philp	14
Irrigation—water and appliances	Mr. Wodsworth	10
Special methods in farm mechanics	Mr. Fletcher	36

Six-weeks courses

Title of course	Name of instructor	Enrollment
School law	Messrs. Werner and McPhee	30
Vocational education	Messrs. Werner and McPhee	20
General farm mechanics	Messrs. Fletcher and Koeber	33
Special problems	Mr. Skidmore	21

Total number different persons enrolled 71

Californians Lead Conferences

The State Department of Vocational Education of Arizona held a vocational conference at Phoenix September 2 and 3 for all the school administrators of the state and called Melvin S. Lewis of the Division of Vocational Education of the University of California to act as conference leader. Mr. Lewis reports that over seventy school superintendents, high school principals, and directors of vocational education were present and laid plans for the conduct of vocational education in their respective schools during the current year. The first half-day of the conference was devoted to a discussion of the general requirements to be met for education conducted under the State and Federal Vocational Education Acts. One half-day each was given over to an intensive consideration of the problems of vocational education in agriculture, in trade and industrial subjects, and in homemaking.

A. M. Davis, state director of vocational education in Arizona, expressed himself as very much pleased with the results of the conference and with the attitude of the administrators, stating that he felt that very much better work would be done the coming year because of the clearer understanding of the problems and methods in the vocational field gained by those in attendance. Arizona plans to make conferences of this character, hereafter, an annual feature of the state program of teacher training in vocational education.

At a ten-day conference for the vocational teachers of Nevada, George Mann, supervisor of vocational education for the city of Berkeley, was the leader of the trade and industrial group. The conference was held at Glenbrook Inn on the shore of Lake Tahoe, August 18th to 28th.

The Nevada state department of vocational education conducted a teacher-training conference for all vocational teachers. Paul Chapman, state supervisor of agriculture education in Georgia, led the conference for the agriculture group.

Mr. Mann gave two courses in part-time education at the summer session of the University of Oklahoma. More attention is being given to vocational education, part-time education, and evening schools in Oklahoma. The part-time schools, particularly, are said by State Director Briles to have made an excellent showing last year.

Vocational Teachers in New Positions

Dwayne G. Young of the industrial department of Berkeley High School has been promoted to the head of the department following the resignation of George F. Haller. Mr. Young's position as instructor in electricity has been filled by E. A. Moffitt.

Richard H. Behrens, instructor in related subjects at Monterey High School during the past year, is now on the staff of the Berkeley High School. Charles E. Draper, an electrical engineer who has recently returned from China, has taken the Monterey position.

John Morrill, formerly of Alameda, is now instructor of vocational woodwork in Berkeley High School.

James A. Wood, formerly instructor at Part-time High School, Sacramento, is now instructor in electricity in the new Alameda High School. Elmer Stewart, who taught carpentry at Chico during the past year, is also a new instructor in Alameda High School.

Miss Mabel Tadich, who has conducted special classes in millinery and dressmaking at Polytechnic High School, San Francisco, has been transferred to the regular instructional staff of the San Francisco Part-time High School. Miss Tadich attended Columbia University during the summer.

W. J. Freeling, for the past year, has served as acting vice-principal of the Roosevelt High School, Oakland, and this year will act as counselor for boys.

Frank Stranzl of San Francisco is now instructor in woodwork at the Fremont High School, substituting for an instructor who is taking a year's leave of absence.

Henry E. Dyson who taught pre-vocational work in the Sonoma High School is now on the staff of a junior high school in Oakland, where he will work out more of his ideas in pre-vocational training for boys.

James M. Dow, a pre-vocational instructor at Washington Grammar School at Vallejo, will be in the industrial department of the Oakland Public Schools for the coming year.

Ralph P. Madeley, who formerly taught mill cabinet work at Margarita Black Union High School in Atascadero, is now teaching in the Elmhurst Junior High School, Oakland. His place in Atascadero is filled by John C. Uhte.

James Boyd, instructor in electricity at McClymonds High School, has returned to Oakland after a year's leave of absence spent as instructor in electricity in the Rochester, New York, Public Schools.

Lloyd M. Sparks who formerly taught automechanics in Porterville High School is now teaching in San Jose.

Joseph Longfield, formerly head of the industrial arts work in Caspar, Wyoming, will be instructor in automechanics at Hanford this year.

Donald L. Fair has been promoted to the head of the mechanical arts department of the Reedley High School.

Three vocational teachers who are taking the year for business, study, or travel are:

Miss Estelle Cross, who has completed her teacher-training work in vocational education and has taught in the San Mateo High School during the spring semester, has taken a year's leave of absence to travel in Europe and study in Oxford University, where she has been given a scholarship.

Hugh L. Reinecke, who has been instructor of automechanics, Chico High School, for the past two years, has taken a year's leave of absence and is now manager of the service department of the Studebaker Automobile Agency, Berkeley. Claude M. Hackley takes the position left vacant in Chico.

Raoul Cyr has resigned from the Sacramento High School to go into business for himself as editor and publisher of the *Rio Vista Banner*.

Among the trade and industrial teachers newly placed in high schools in the northern and central part of the state are: Walter E. Brock, printing; Fred T. Brosi, sheetmetal work; G. E. Browning, woodwork; C. L. Olson, woodwork; Robert P. Townley, automechanics; and Horace Wahl, printing, all in San Francisco. In Oakland, Fred J. Martin, printing and C. H. Townsend, woodwork. In Alameda, William B. Skowran, woodwork. In San Jose, Irvin Copple, woodwork and Geo. B. Miller, sheetmetal work. In Berkeley, Mrs. Antoinette O'Brien, dressmaking; in Santa Barbara, Leo L. Ingraham, printing; in Selma, George W.

Woolwine, automechanics; in Taft, Jay Schumacher, machine shop; in Delano, Lawrence Abbey, automechanics; and in Santa Cruz, Charles V. Stewart, carpentry and mill cabinet work.

* * * * *

There have been a large number of changes in teaching positions in the Southland, mostly additions to the staff in the different schools. Information in detail cannot be given at this writing of all of these changes. The following, however, are some of the most important and are affected by the rapid development of the Frank Wiggins Trade School.

Harold E. Hess, a specialist in automechanics and formerly head of the department at Lincoln High School, has been put in charge of developing the automechanics department at the Frank Wiggins Trade School. The Automotive Dealers' Association, on the recommendation of the advisory committee in automechanics for the school, sent Mr. Hess throughout the East the past summer to visit trade schools and automobile factories. The result of his visit will undoubtedly appear in the up-to-date type of equipment and in the courses to be given under his direction. Mr. Hess will tell something of his experiences in an article to appear later. Mr. Hausken, formerly at the Fremont High School, has been chosen to assist Mr. Hess this fall. Temporary quarters for this department have been opened near the site of the new school in a large garage which has been supplied by the Automotive Dealers' Association.

The position left vacant at the Fremont High School was filled by Mr. E. B. Dale, who has had teaching experience at Colorado Agricultural College and many years of practical experience in the automotive industry.

Harry C. Hurlbut of the San Pedro High School, takes the teaching position at the Lincoln High School made vacant by Mr. Hess. A new teacher in the field, R. J. Wilson, takes the place of Mr. Hurlbut at San Pedro.

Grace B. Clauson, who completed the teacher-training course last summer and who taught flower making in evening classes at the Frank Wiggins Trade School last year now takes a full assignment in millinery in this school.

Gertrude B. Paulus, another new teacher in this school, has been assigned to the department of commercial art, with emphasis on illustrating and advertising. Miss Paulus has had extensive experience in business and has also had some experience teaching.

Leslie A. Miller is a new instructor in the course in plumbing. Mr. Miller completed the first year of the teacher-training work the past summer. He has had extensive experience in all phases of this work as a journeyman and as an employer of plumbers. He undoubtedly will develop a very strong department.

The department of interior decorating, painting, and paperhanging was conducted last year by Louis F. Danforth, who has been transferred to Lincoln High School. His place has been taken by Ernest C. Waite, who has been following his line of work in Los Angeles for the past fifteen years, during which time he has held important positions with leading firms in the city.

The department of telegraphy has been increased by one more instructor, Hollis D. Zaring, who comes directly from the industry. The department of printing has added another assistant, James H. Hallock, from the Warren G.

Harding High School at Sawtelle. A specialist in monotype work is also to be added to this department. Some half dozen other courses are in contemplation at the Frank Wiggins Trade School.

Our Homes

(Continued from page 7)

Should the government build roads?

Do you think the man who owns a car should pay a greater tax than the one who does not own a car? Is this provided for?

How many taxes must be paid on a car?

What other types of personal property are taxed?

Savings and Insurance

Should people who are studying about homes be interested in savings and insurance?

Name several plans of systematic saving.

What is a savings account?

How do you open one?

How much money does it take to start one?

What interest is paid?

When does the interest start?

Must you put in regular amounts at regular times?

What happens if you do not?

Is a savings account considered safe?

Is it ever unsafe?

How can you be fairly certain of its safety?

How is the building and loan like or unlike the bank savings account?

What other types of investments promote savings?

What is the purpose of insurance?

What kinds are there?

Are all insurance plans safe? Which are the safest?

How is insurance used as a method of saving money?

How can boys and girls with small wages save money?

SOME SUGGESTIONS FOR OTHER LESSONS

1. The furniture we use

Evolution of furniture

Types as influenced by habits and customs of the times, reflecting even the political (French, Louis XIV) and religious (Puritan) beliefs of the times

Manufacture of furniture

Selection

Cost

Use

Taste

Durability

2. The clothes we wear

History of styles

Things formerly necessary retained for adornment

3. Evolution of manners

4. Sanitation

Refrigerator

Pure food laws

Laws regulating food production and conditions, such as milk inspection

5. Lighting

Evolution of home lighting

Sun, moon

Fire

Crude torches and oil lamps

Petroleum

Electric light

6. What the automobile has done for us

7. The radio and what it is doing for us

What Would You Do As Coördinator?

Our schools have set as a goal not only a high school education, but health and good citizenship as well, for every boy and girl. With parents, health authorities, social agencies, and service clubs, they are attempting in one way or another to accomplish this ideal. When the youth finally leaves the full-time school, for one reason or another, the part-time school takes up the problem and tries, through a more personal contact with the home, to solve the problem. Here are a few stories told by one coördinator. How would you advise him to handle each case, in order that the boys and the girl described may have a fair chance in life?

Emil

Emil's father, a machinist, was born in Germany, but his mother was born in America. The school records show that when he was a little over sixteen years of age, Emil quit high school in the first term of his second year. When asked about his school career, Emil frankly said that he couldn't get along with his principal and had been expelled in his first year. He also added that he didn't always know why he had been reprimanded, but teachers indicated that usually it was for neglecting his school work and for truancy. His intelligence quotient is a little below 100. It was because of constant trouble that Emil finally quit school, but now he would like to return and complete the necessary credits for a course at some agriculture college.

Emil has no definite ambition, but feels that the agriculture course would perhaps fit him to manage a small orchard which has been left to him and his brother by a grandmother who also left him money for an education. He would like to go to sea, he thinks, but since his mother is in poor health and his father has recently been injured at his trade and is still unable to work, he feels he should remain at home. Emil has held two different positions of several weeks' length; one with an automobile concern and the other with an auto-equipment company. He does not contribute to the support of his family, however, but uses his money for personal spending and for the upkeep of a small automobile.

The house in which Emil lives is owned by his parents. It is small, but furnished comfortably and in good taste. Besides this home, the family owns other property and a medium-priced automobile. The father and mother seem to be congenial and very much interested in Emil and his older brother, who is married. Emil's mother, for whom he has a warm affection, was distressed when he left school, but because of his growing dissatisfaction, she felt that he would benefit by working for a while and would come to see the value in the schooling which he had given up.

Emil does not get along with his father, who is very irritable with him, and who is easily provoked to argument and anger. The father's boyhood in his native country had been spent in rigorous training as an apprentice and perhaps he is influenced in his attitude toward his son by this strenuous manner of early rearing. Despite the misunderstanding which seems to exist between them, the father is proud of his son's ability to progress in his work, although he wants him to return to school. What can the coördinator do for Emil?

Harold

Harold comes from American parentage. His father is a carpenter and his mother is employed in a laundry. The school records show that Harold had finished the eighth grade in a junior high school when he left school just before his sixteenth birthday. Before leaving school and for several months afterward he was messenger boy for a telegraph company. His next employment was with a small pharmacy, where he was both delivery boy and soda-fountain clerk and where he is still working. Although Harold has earned his own spending money since he was ten years old at selling newspapers and magazines, it was not from financial necessity that he left school. His parents wanted him to continue in school, and allowed him to quit only on condition that he would work and save enough money to attend a technical school where they want him to prepare for a trade. His mother has a coöperative spirit toward the schools, and is worried because Harold will no longer attend. She said that he had never been interested in school work and was a truant so often that he was finally brought before the attendance department and, although he improved in attendance, he begged to be allowed to quit school. Harold's excuse for leaving school was that he had always disliked the "cooped up" feeling that a schoolroom gave to him. He is typically an "outdoor" boy, thoroughly enjoying the country where he may hunt, fish, and tramp. When at home Harold's leisure hours are devoted to reading and much time is spent at a library that is in his neighborhood.

Harold's home is a small, inadequately furnished apartment in a neighborhood of apartments and old houses. The apartment house has no yard space and is in need of repainting. Because the mother is away in the day time, the house has a neglected, untidy appearance and the air is close. It has miscellaneous and cheap furnishings which are worn and dingy. There are no pictures on the walls, but there are shelves of books and Harold is starting a library of his own, buying a book for it on each payday. Harold is now attending a part-time school. What can the coördinator do for him?

Nora

Nora and her brother and sister are of American parentage. Her mother is dead and her father, who was an industrial worker, is so ill with tuberculosis that he is no longer able to work. Nora's older sister receives a little more than the minimum wage as a clerk and this is the only family income other than a lodge benefit which will soon terminate. The small brother is in the first grade at school. Nora's last year in school was very unsatisfactory. She seemed constantly worried about the financial difficulties at home, and seemed to be shunned by the other girls because she was never well dressed. Her teachers said that her school work was fair and she had an intelligence quotient of about 95. She worked at odd times at such jobs as she could find in the neighborhood and spent a great deal of time looking for work.

The flat in which Nora and her family live is dark and very dirty. Nora's own bedroom is an inner room without

an outside window. The most unsanitary conditions prevail. The kitchen seems to receive little of Nora's attention. A ragged oil cloth covers the table and flies are everywhere. The hallway is piled with dusty newspapers. Coats, dresses, and underwear are hung on nails about the rooms. Every drawer bulges with trash, and tables and sewing machine are stacked high with misplaced articles. The father, emaciated and feverish, lies on a couch in the living-room and his whole personal appearance shows a lack of proper care.

Nora left school to keep house for this family of four. She would also like to add to the family income if possible. What can the part-time school do for Nora?

Ralph

Ralph is a boy of American parentage whose father is a truck driver. His school record shows that he left in the first term of high school, just before he was sixteen. After leaving school he was employed at various odd jobs, but his chief employment was somewhat irregular work at a baseball park where he was an usher and errand boy. Ralph has two older sisters. One is married and the other is employed and supporting herself away from the home. He also has two brothers and three sisters younger than himself. Three of these are too young to be in school. Ralph and his five brothers and sisters live in a five-room house which is inadequately lighted, needs repair and paint, and is ill kept inside and out. There are no rugs on the floor, no pictures on the walls, and the furniture is sparse and inadequate. The shelves and corners are filled with dirt and trash and the air is foul.

After Ralph finished the eighth grade his school work seems to have been quite unsatisfactory. He entered one private and three public high schools within one year and finally dropped out while still in the low ninth grade. Ralph claims to have left school because of trouble with his eyes. He managed to elude the attendance officers for about a year and finally his mother registered him in the part-time school where he again attends very irregularly.

Ralph is a restless, nervous boy who gives his nervousness and poor eyesight as an excuse for all his misfortunes. The only thing in which he expresses any interest is baseball and although he does not seem to be baseball material he thinks he might like to become a baseball player, and is a worshiper of baseball heroes. Ralph's irregular employment does not seem to trouble either Ralph or his mother. The latter expressed confidence in the ultimate success of her son and felt that when he was 18 years of age he would automatically find a job and become a responsible, self-supporting citizen. Until he reaches that day of miraculous change she supplies him with spending money so that with the trifle he earns he manages to see very little of his home. He eats all of his meals down town, and is never home in the evening except to go to bed. One glance at the interior of the house would easily explain why Ralph spends so much time away from home. It is about as bare of furniture and comfort as any house could possibly be. Very little food is prepared in the home and the children live principally on fruit which needs no cooking and is, therefore, easier to serve than vegetables. The house is in an unattractive part of town near a laundry and a coal yard.

Ralph is now doing a little shopwork when he attends the part-time school. What can the school hope to do for him in the few months he must still attend part-time classes?

Sidney

Sidney is an American-born boy of Jewish parentage. His father works in a local restaurant at a small wage and the mother works as a hairdresser. School records show that Sidney left high school in the last term of his sophomore year when he was seventeen. They also show that in the early part of his school record the four terms from the second to the fourth grades were repeated. This accounts for his age when in the second year of high school. Since leaving school at the first of the year, he has been employed as wrapper in a bakery, where he is paid forty cents an hour. On Saturdays he clerks in the shoe section of a department store and there makes practically the same amount per hour. A very small percentage of this salary is given to his family. It is Sidney's ambition to become a shoe salesman. In spite of the fact that Sidney tests rather low mentally, his grammar-school record showed that he took a prominent part in the school activities and was somewhat of a leader. His school attendance was irregular, however, and he usually failed to make up work missed during periods when he was absent.

The family spirit in Sidney's home lacks cohesion. The father works at night and the mother is seldom at home during the day. Consequently Sidney and a brother and sister are left to shift for themselves. The brother, who is older than Sidney, is employed as a mechanic. The sister, who is the youngest of the three children, still attends high school.

Sidney now lives in a small house, which is owned by the family. It is clean appearing, in good repair with well-kept lawn and flowers. The furniture is of rather a miscellaneous character and the carpets are badly worn, but the whole appearance is orderly and clean. There is plenty of light in the house but the air is stuffy and has in it an "unlived-in" quality. There is a piano and a victrola and a case of books. The father and mother are interested in the welfare of their children and have given to them the benefit of both musical and dancing instruction. The father stated that Sidney could have finished high school and he had urged upon him the advisability of doing it, but Sidney was not interested in his school work and felt that he was wasting his time. What can the part-time school do for Sidney?

CORNERSTONE CEREMONIES

The eleven-story building of the Frank Wiggins Trade School of Los Angeles is nearing completion and the cornerstone was laid with appropriate ceremonies on September 14th. The development of this school is meaning so much to the industrial life of Los Angeles that the ceremonies brought out a large audience of representative citizens from business organizations as well as from educational institutions. When the school moves to this new building in February, Howard A. Campion, the principal, expects to provide instruction in thirty different trades. The building which is now being erected will take care of about 7,500 students daily and with the additions which are provided for it may take care of several hundred others.

Part-time Particulars

New Coördinator in Berkeley.—H. M. McClelland from Stanford University has been chosen as instructor and coordinator in commercial work by the Berkeley Part-time High School. Another addition to this school is W. T. Hicken from Utah, who will teach a special group of boys.

Oakland Adds Two Trades.—The Oakland Part-time School has engaged George Engs, who did such excellent work in the part-time school in Pittsburg last year, to do a similar piece of work with a special group of boys in Oakland. New equipment has been added for woodwork, and boys who need special direction are given this work. Mr. Engs will later start some large projects similar to the club house he built with his boys last year.

For the girls a new trade has also been added. Miss Marie Schroeffer is the instructor in a new course in beauty culture and personal hygiene. Miss Schroeffer is teaching the girls that beauty depends upon good health in both mind and body.

Contra Costa Part-time Schools Grow.—The Pittsburg Part-time School has a new director, taking the place of George Engs who resigned to take a position in the Oakland Part-time School. J. Harvey McCammon, from Bakersfield, is the new director in charge of the work for boys. Miss Mina Ames is the new teacher of home economics and will build up classes for adult women as well as for the girls of part-time-school age.

The director of the part-time school in Crockett, Mary F. Meeredy, has this year become school counselor as well. She, therefore, has an assistant for the part-time school teaching. Miss Mary Greenwood, who has just completed work for her master's degree in household science at the University of California, is teaching general science to the boys and home economics to the girls of the Crockett Part-time School.

Martinez has also had a change in the part-time school personnel. Miss Anna Lopin, who reorganized the school last winter, has gone to teach in the Fresno State Teachers College, and Miss Bertha S. Wills, from the home economics department at Pacific Grove, is in charge of the work for girls this year. For the boys of Martinez, entirely new work is being added. M. K. Rabenstein, who has had a wide trade experience from engineering to aviation, is organizing classes for the boys after visiting their places of employment.

New Teachers in Sacramento.—Three vacancies in the staff of the Sacramento Part-time High School were made by the resignation of Miss Ruth Turner, who is now in charge of the placement bureau at the San Francisco Part-time High School, James A. Woods, now at the Alameda High School, and William Rutherford, who is at Galt. These gaps were filled by Miss Elizabeth S. Favor, H. H. Crawford, and J. T. Peterson, respectively.

Miss Favor, who comes from New York City, has had training at both eastern and California universities. She also has a broad knowledge gained from valuable business experiences and from war-service work abroad.

Mr. Peterson comes from Sutter Creek Union High School, where he was athletic coach. With Mr. Crawford, who comes from Dunsmuir High School, he will coach the Sacramento Part-time School teams in baseball and basketball this year.

Coöperative Courses Started.—There was initiated for the first time with the opening of the school September 13, a coöperative part-time course in conjunction with the Axelson Machine Works whereby twenty boys are to receive thorough training as apprentices in machine shop work at the plant and, in alternate weeks, their high school training at the Huntington Park Union High School. Victor Capon, who has been in charge of apprentices at the plant, is to be continued as an instructor of this group at the plant and, at the same time, be a member of the teaching staff of the high school. H. A. LeBihan, who is head of the department of vocational industrial arts at the Huntington Park High School, is in general charge and is acting as coördinator for the school. Out of a large number of applicants for this course there are at present eight in one group and five in the other who are at work at the plant and at the school. The number is to be increased to ten in each group.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION, UNIVERSITY OF CALIFORNIA, AND OF THE STATE BOARD OF EDUCATION

PART-TIME EDUCATION SERIES

- Bulletin No. 1. Syllabus of an Introductory Course on Part-time Education. January, 1920. (Out of print.)
- Bulletin No. 2. An Analysis of Department Store Occupations for Juniors. December, 1920.
- Bulletin No. 3. Coördination in Part-time Education.
- Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921. (Out of print.)
- Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- Bulletin No. 7. The Work of Juniors in the Telegraph Service. April, 1922.
- Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922.
- Bulletin No. 10. Third Annual Report of the Director of Part-time Education. Stockton, California, October, 1922.
- Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One. March, 1924. Part Two. May, 1924.
- Bulletin No. 18. The Part-time School and the Problem Child. April, 1926.

TRADE AND INDUSTRIAL SERIES

- Bulletin No. 12. Analysis of the House Carpenter's Trade. March, 1923. Price 40 cents.
- Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price 40 cents.
- Bulletin No. 15. Analysis of the Plasterer's Trade. April, 1924. Price 40 cents.
- Bulletin No. 16. Analysis of the Automechanic's Trade. June, 1925. Price 60 cents.
- Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. June, 1926. Price 50 cents.

AGRICULTURE EDUCATION SERIES

- Bulletin No. 8. Job Analysis Applied to the Teaching of Vocational Agriculture. May, 1922. (Out of print.)
- Bulletin No. 11. Farm Mechanics for California Schools. November, 1922. (Out of print.)
- Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

More Schooling for the Unemployed

Recent movements in education have shown an expansion of the school program in length, in breadth, and in thickness. The length of school life has been extended upward and downward—upward to include adult education, and downward to include the pre-school child. The compulsory full-time school age has been extended to 16 years and the part-time school age to 18 and even to 21 years in the case of those who cannot meet a certain standard in reading and writing English.

The schools have broadened their curricula to include the arts and the vocations, and to include special classes for those handicapped mentally or physically. Expansion in depth has taken place in many cities by extending the regular school term to ten months and by adding a summer term. The tendency seems to be toward the year-round school. There is educational expansion in still a fourth dimension; teachers are leaving the four walls of the school room, and are going out into business and industry saying, "Let us help you train your young workers by special instruction in part-time classes or in cooperative classes." They are even saying, "Let us train your foremen to become better teachers of your young workers through foremanship-training classes—not in our schools, but in your establishments."

One Group Left Out

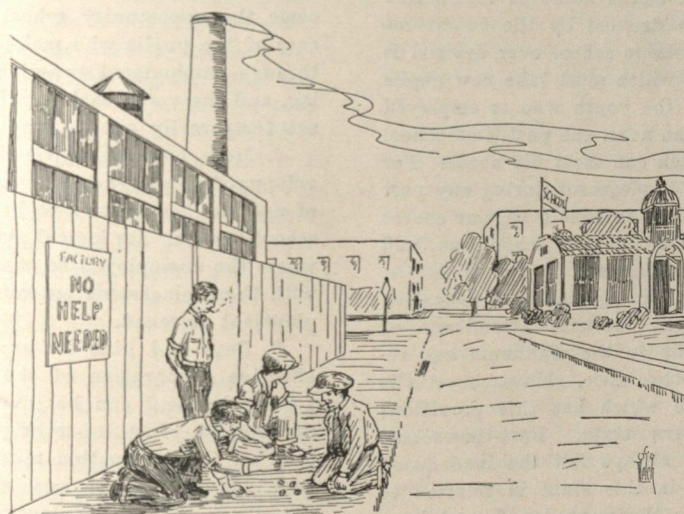
With all this expansion of educational program, the school has become conscious of certain groups which it is still failing to reach or failing to give the best it has to offer. One of these groups is made up of boys and girls between the ages of 16 and 18 years who leave school and who do not, or can not, find employment. They leave, for the most part, because they are not interested in the type of instruction they have been receiving or because

they have already gone beyond the educational standard set by the family; but they are still unprepared to meet the problems of self-support and efficient citizenship. They become idlers and loafers—an unstable group in the community with great possibilities for good or ill for themselves and for society.

For the young worker there is provided the part-time school with four hours of instruction a week. That four-hour period, short as it is, is valuable because it is going along with his occupation or his ambitions. But in the case of the unemployed the one-half day a week at school

must compete with six and one-half days of idleness.

Every teacher in the part-time school knows how difficult a problem is presented by the boy or girl who, without employment or home responsibilities, drops into the part-time school for only four hours a week. However, there is only a limited amount of employment open to boys and girls under 18 years of age. If society can not provide profitable employment in business or industry for its young citizens, some other use of these valuable years of their lives must be made.



One half-day of school cannot compete with six and one-half days of idleness.

More Schooling Means More Supervision

The obvious solution to the problem is more required hours of schooling. Take, for example, the case of Lewis H—, who was the oldest of three children. His father, a steamfitter, worked in another part of the state, and his mother was employed in a restaurant from four in the afternoon until midnight. Lewis dropped out of high school at the age of 17 when in his junior year. He was on the track and rifle teams in high school, and was an expert swimmer, but he escaped all the work he could, and was reported for truancy five times. His work in school was, therefore, unsuccessful, so Lewis asked for a

transfer. This was refused so he retaliated by such conduct that the school was glad to transfer him. He soon left the new school, however, giving poor health as an excuse. Apparently he really was anaemic and undernourished. He is now without adequate home supervision, is unemployed, so has no job supervision, and has only four hours a week of schooling. From such cases as this are recruited the gangs and loafers who become liabilities in the community. Is the state doing all it can for itself and for Lewis in allowing this condition to continue?

Lillian K— is another case of a pupil leaving school as a purposeless drifter. Her father is making a salary adequate for the support of the family. The family moved so often that Lillian attended six different schools in the course of the first nine grades. Her I Q was only 98 and her scholarship was fair. At the first possible moment she left school, giving as her reason that she liked art, but was not interested in other subjects. She had a vague idea of earning enough to attend a business college. Her services are not needed at home. She attends a sewing class irregularly in the part-time school. Why should Lillian be allowed to waste her time when the part-time school can give her, if she attends enough hours, the business training which she could obtain in a private business college?

Part-time School is an Adjustment School

The problem of where the added hours of instruction should be given can best be decided by the conditions in each case. The most adjustable school ever devised is probably the part-time school which must take new pupils every day of the year. For the youth who is employed one month and unemployed the next, the part-time school is no doubt the only one which can meet his needs. For the youth who is not seeking employment during any part of the year, but who is unwilling to take a regular course leading toward graduation, the full-time school can, and should make the necessary adjustment.

A number of other states having part-time education have, from the first, required full-time attendance of unemployed boys and girls up to the maximum age required for part-time-school attendance. Massachusetts is an outstanding eastern state which has this provision; Utah an outstanding western state. Part-time-school directors in California have always felt the inadequacy of the part-time-school law in this state in relation to educational opportunities for the unemployed, and have been asking for an amendment to "take up the slack" during periods of unemployment.

Schooling and Employment Service for the Unemployed

The present Senate Bill 568, presented by Senator Jones, is intended to make possible just this expanded program for the unemployed youths under 18 years of age. The amended sections of the law are as follows:

"Sec. 3. First—All persons under eighteen years of age . . . who have not graduated from a high school maintaining a four-year course above the eighth grade of the elementary school, or who have not had an equal amount of education in a private school or by private tuition, who are not disqualified for attendance upon these classes because of their physical or mental condition, or because of personal service that must be rendered to their dependents, who reside within the legal boundaries of the

high school district and for whom suitable transportation is available to special part-time classes maintained, either voluntarily or under the provisions of this act by a high school district, and who are not in attendance upon a public or private full-time day school or satisfactory part-time classes maintained by other agencies, shall be, and hereby are, required to attend upon a special part-time class maintained by the high school board of the district wherein they reside, or by the high school board of an adjoining district, for not less than four sixty-minute hours per week for the regularly established annual school term if they be regularly employed, and for not less than twenty sixty-minute hours per week during whatever part of the regularly established annual school term they cannot give satisfactory proof of regular employment; . . .

"Sec. 4. First—(d1) They shall provide adequate employment service to all minors desiring such service.

"Sec. 15. . . . No high school board may be required to establish special part-time classes under the provisions of this act unless there are in the district twenty or more minors under eighteen years of age who reside within the legal boundaries of the high school district and who would become subject under the provisions of this act to compulsory attendance upon said classes. The amendments to section 3 of this act shall become effective for minors under seventeen years of age on July 1, 1923, and for minors under eighteen years of age on July 1, 1929."

The new words or sentences are in italics.

Results to be Expected

The passage of Senate Bill 568 will mean:

1. *Increased opportunity.*—The part-time school will become the opportunity school of the community to take care of the pupils who make greater educational progress through employment experience and supplementary training, and the vocational training school for the pupils who are temporarily out of employment.

2. *More boys and girls finding employment.*—The development of placement bureaus for juniors up to 21 years of age has been shown to be a necessary function of the school system. Its logical place is in the part-time school, where the unemployed boys and girls can be kept in touch with these placement bureaus and their periods of unemployment lessened.

3. *Boys and girls better prepared for jobs.*—A more effective preparation of the unemployed boys and girls for employment can be given in 20 hours than in four, making use of out-of-work periods. This does not mean that all the instruction must be given under the school roof, but the school may arrange for twenty hours of education through "placement training" or "try-out employment" for boys and girls in many different types of occupations.

4. *Better use of leisure hours.*—Keeping the unemployed youths off the streets and in touch with teachers who study their problems will make possible a more effective program of moral and social guidance.

5. *Wider scope.*—Every child 14 to 18 years of age in the high-school district who is within reach of transportation will have the protection of the law to secure the benefit of part-time education regardless of where he lives.

The features of this act have been approved by parent-teachers' associations, social workers, women's clubs, the legislative committee of the C. T. A., part-time-school directors and teachers, and employers who have a social vision. The bill has met with no opposition in either the Senate or the Assembly.

Dr. Cooley Talks on Citizenship

The part-time group of the California Teachers' Association was addressed each afternoon during the week of the institute in Los Angeles by Dr. Robert L. Cooley, director of continuation and vocational education for the city of Milwaukee. Dr. Cooley is one of the pioneers in continuation and vocational work in the country, having begun this work in Milwaukee in 1912 before the introduction of the Smith-Hughes Act.

Citizenship the Whole Curriculum

Dr. Cooley's topic for the first afternoon was, The Citizenship Project of the Part-time School. He said, "We are all engaged in the citizenship project. All the work we do in the schools is citizenship; the function of government is citizenship; business is just the necessary work to be done toward building homes. Health, character, and earning power are absolutely essential to citizenship, and comprise practically the whole curriculum of the continuation school."

In 1909 Dr. Charles McCartney suggested to the legislature that a committee be established to study the problem of what could be done for young people who must leave the elementary school and the high school and go to work. The report of the committee was made to the 1911 legislature, and a law was immediately passed providing that young people up to the age of 16 years should return to the part-time high school one-half day each week. The pioneer task of organizing the work was given to Dr. Cooley, and it was by no means an easy problem. Employers did not all take kindly to the prospect of having their employees leave their work for a half day each week to go to school, and they did not believe that much could be accomplished in such a limited amount of time. He found, also, that the hardest people to convert to the idea were the school people who could not see that anything could be done in so short a time when it was difficult to accomplish much in even five days a week.

The part-time school even in Wisconsin is not yet a wholly accepted institution, but it is there to stay. Every new enterprise has to contend with criticism. In the early stages of the continuation-school movement there were so many opportunities to go wrong and so much to learn. Dr. Cooley indicated that one mistake which was made in the beginning is still affecting the work; the notion seemed to be prevalent that young people were being sent back to the part-time school with the idea that it was a stint to be worked off, that another rung had been added to the ladder of juvenile education. Instead, he contends, it should be considered the beginning of adult education—the first rung in the ladder of adult education.

Earning While Learning

The topic for the second day's talk was, How Milwaukee and Wisconsin Met the Problem of Those Who Earn While They Learn. Dr. Cooley stated that, "The budget allotted to the elementary and high schools of Milwaukee is a little over \$6,000,000. It is an interesting fact that the average earnings of the 12,500 people of

high-school age who are out in industry is also a little over \$6,000,000, or an amount sufficient to pay for all public-school education. If we deny education to this group we are like the man with eight children who boasted about the education he was giving his family; but upon investigation was found to be depending upon his three older children, who were working, to foot the bill for the education of the younger ones. Many cities in the United States are doing this very thing.

"The people in educational work haven't more than half believed in education," said Dr. Cooley. "They look at the taxes for school purposes and are startled by the aggregate, but all we need to do is figure a little and we will see that we haven't begun to tap the public moneys to apply for education. Our finances should be made to cover every phase of education that it is possible for us to promote."

The vocational work does not receive much state and federal money in Wisconsin. When Dr. Cooley began his work in Milwaukee in 1912, it was necessary to depend entirely upon local taxes for support. The tax limit is now 1½ mills. Milwaukee does not believe in simply dragging young people into an institution without regard to whether it is prepared to give them adequate training. He therefore is centering his attention now on the group from 16 to 18 years of age that is required to attend school 8 hours a week. Milwaukee hopes soon to be able to take care of the half-day group from 14 to 16 years of age.

In establishing this work, Milwaukee met the problems that other communities have had to meet, according to Dr. Cooley. There were employers who said they would not hire children who had to go to school one day a week. They said they could get plenty of people over 18 years of age to fill the positions. Dr. Cooley told them that their plan was fine as it would give employment to those people who needed it, and give an opportunity for those under 18 years of age to prepare themselves for positions later.

Dr. Cooley chooses just one argument for this work and that is the economic argument. He believes that sound economics is as basic to our proper social development as sound health is basic to our mental and spiritual qualities. There are people who believe the expense is unwarranted; but they have not stopped to figure the value of such training. If we were to take these 12,500 young people when they leave school at 14 years of age and, by guidance, counsel, and assistance in placing them in employment, follow them for three or four years after employment, it is estimated that their average earning power would be found to be increased about \$200 annually. This yearly increase they would earn and spend over a period of about 40 years. This amount makes a grand total of \$100,000,000 in the course of a lifetime of these 12,500 people. This gives an idea of the wealth that would be created. The thing that we have to learn is that our wealth comes from two factors: one is our natural resources, which is a fixed factor; and the other is our people, which is a variable factor. There is no source for increasing wealth except through our people.

The part-time school is winning the support of trade unions, employers, chambers of commerce, and churches. The employment of part-time pupils is showing certain economic and educational results: while the same amount of work is done, it tends to give employment to a greater number of people by limiting the length of the working week; and it gives a number of people, who have not been adjusted in the full-time schools, a certain advantage in arranging for a part-time "earn-while-you-learn" program. Such a program should be made so flexible that the pupils can spend whatever time they can spare from their work in school in addition to the fixed minimum set by law.

Dr. Cooley stated that in his contacts with the part-time group he rarely thinks of it as a vocational school, but regards it as a school where we are to meet these young people face to face, where we abandon all precedent, and when we have discovered their needs, meet them whether they are the conventional needs ordinarily met by a school or not. The part-time school should, he contends, be an institution where teachers see that matters of character, of attitude, and of life, not ordinarily found in a school, should be essential objectives.

Limitations of the Trade School

The topic for Wednesday afternoon was Adult Continuation and the Evening-School Program. Dr. Cooley emphasized the economic justification of the continuation-school program, saying that education is the source of wealth; and that, "Business as we know it today is the gift of education."

Dr. Cooley believes that objections from employers come from the fact that many of them have to compete with other employers who do not approve of the part-time law. Without the law, however, the young people who wish to gain more education and spend a part of their time in school would have to compete with others who would be willing to work full time. The compulsory laws are not for the purpose of diminishing freedom, but of increasing freedom.

Dr. Cooley then touched upon the trade school where the boys attend three or four years and get their credentials as journeymen in a certain trade, after which they rarely follow the trade for which they have been preparing. He thinks that if a family is economically able to send a son to a trade school for three or four years, it might just as well send him to the regular high school for that period. He believes trade schools to be wonderful institutions, and the education excellent, but as a means of furnishing us with an *adequate* flow of people to do our journeyman work, they are entirely unsatisfactory. The trade schools are not giving the schooling to the particular group that is going to do the journeyman work in the future.

The chief criticism of organized labor toward the trade school is its limited scope. In most schools the training is limited to ten or twelve trades, while there are thousands of trades by which men earn a living today.

On the third day Dr. Cooley dealt largely with the organization of the part-time school work in Milwaukee. Milwaukee appoints a director and a board that, with the superintendent of schools, deals with the problem in its

various phases. This organization is under an entirely different law so far as teachers' credentials are concerned. It can authorize the employment of any expert, but the work done must meet the approval of the state department of vocational education.

Separation of the Part-Time School

The problem of whether the part-time and regular school work should be separated was touched upon. Dr. Cooley said that the general impression seems to be that in part-time education we are doing something for the poor and the sub-normal. They are consequently treated in a patronizing manner by the teachers and pupils of the regular school. His observation has been that where there is almost complete segregation and separation the part-time-school pupils begin to show a certain pride in themselves and are treated with respect by others. They should be given an identity as rapidly as possible.

Guidance in the Part-Time School

One of the chief functions of the part-time school, according to Dr. Cooley, is to analyze the situation to see which of the people who are leaving the high school are leaving it unwisely. In Milwaukee they have set up an agency for the purpose of studying carefully the group going out into employment, and, if these people are leaving the full-time schools unwisely, of sending them back to full-time school. They have found that some are leaving because of financial necessity. Upon investigation, these people are given what is called a "Class B" scholarship and once a month they get a check from the treasury which is limited in amount to \$15.00 per month.

Dr. Cooley says that vocational-guidance work has been a great perplexity to him. There are two ways to look at it. The employer wants a boy who will do the job the most good, while the boy wants the job that will do him the most good. He is opposed to the kind of vocational guidance that takes exclusively the employer's viewpoint and is endeavoring to fit boys and girls purely on that basis. In the last analysis, our business is to develop men and women. "Industry is made to serve humanity, not humanity to serve industry."

Dr. Cooley then took up the matter of apprenticeship, stating that, "It has been a good thing in the past, because it is recognized that a program of apprenticeship is an endeavor to make a base big enough on which to build a life. It is a base of preparation big enough to sustain a life, and the kind of life that we expect Americans to live."

In the development of the guidance system in Milwaukee, there is a preliminary period when they send the young people into a variety of shops for a period of three months each, and try to bring them to a point where they show a desire for life. Then, they begin an apprenticeship course to fit them for whatever trade they show a preference. From this beginning follows the entire scheme of adult education.

Citizenship an Attitude

Dr. Cooley concluded his talks by referring again to the citizenship-training problem. The following quotations are taken from his remarks:

"The citizenship training that I expect to see in our schools grows very largely out of the fact that we recognize that the teachers have to be scout leaders in their abilities and attitudes." "Citizenship doesn't consist of a body of knowledge; it doesn't consist of a knowledge of the constitution; but citizenship is an attitude." "The question of citizenship is like all of the moral training that comes into our school. You can't get blue-print lessons in it. There have been some excellent things done, some excellent things written on the subject, but the whole thing is so much in getting the right attitude—the right spirit in the work." "The great value in the vocational work we do is the fact that it is a vehicle for carrying the lessons in citizenship." "If we forget the tremendous moral values that we have to put over and do not develop zeal, our school will be relatively cold and fruitless."—BENJAMIN W. JOHNSON.

Fresno Survey Continues

By LYNN E. STOCKWELL,

Director of Vocational Education, Fresno, California

The department of vocational education of the Fresno public schools is carrying out a definite program based on the findings of a vocational survey made there last year. This survey is not a completed one, but is to be used as the basis for a continuous survey which will be carried on under the guidance of the Director of Vocational Education. Industry and labor have combined their efforts with those of the public schools to put forth a successful and effective vocational program in the schools. This spirit of cooperation was evidenced by the amount of time and energy given by the advisory committees during the survey.

Using as a basis the recommendations of the survey group, a course in auto electrics has been organized in the Fresno Technical School. Neil Mackay, a journeyman automechanic and auto electrician of years' standing, is in charge of the course. Twenty boys are enrolled in this course and more are clamoring for admission. An entire room has been set aside in the shop building for this work, and it is being equipped with modern auto electrical equipment. All boys electing trades work in auto-mechanics, as well as those taking it as a specialized trade, will receive this instruction.

The Smith-Hughes trade work in the Fresno Technical School has increased 100 per cent over any previous enrollment. There are, at the present time, 200 boys enrolled in strictly vocational work in trades and industries, while the largest previous enrollment was 98. The junior-high-school counselors have been, in a large measure, responsible for this increase in enrollment.

The counselors are carrying on a determined and apparently successful guidance program. The members of the group meet twice a month to discuss problems arising in their daily work. A definite program for these meetings has been arranged for the entire school year, and each counselor has his share in the program. The guidance plan is being developed along the lines of the recommendations in the recent survey. A seminar in vocational counseling, in which the city school counselors are enrolled,

is being offered at the State Teachers' College by Lynn E. Stockwell, head of the vocational education department in the college.

The enrollment in the E. R. Snyder Continuation High School, for the present year, has been approximately the same as for last year, but the total attendance hours for the first month showed a gain of 10.5 per cent. More than 150 working permits have been issued to boys and girls for seasonal employment in the various packing plants. Among the pupils enrolled, nine are over 18 years of age, and three are high-school graduates.

R. F. Aspinall, principal of the E. R. Snyder Continuation School, has been connected with part-time work in Fresno since the passing of the law granting school privileges to employed minors under 18 years of age. First as coordinator, and then as vice-principal of the Fresno Technical School, wherein part-time classes were housed, he kept in touch with part-timers and their problems. He has not failed to stress the social and civic values of part-time education, and has organized a student body directed by a student council composed of ten representatives—one from each half-day group. Assemblies, social evenings, and a school paper are other extra-curricular activities.

Fresno is particularly fortunate in having secured a branch of the Junior Employment Service of the United States Department of Labor. Excellent cooperation has always been accorded school activities by employers in Fresno, and there is every reason to believe that the additional service which can be rendered through the employment division will merit a still closer relationship. The vocational survey begun last year has provided many additional contacts and should make possible an increased placement efficiency. With the improvement in economic conditions will come added demand for junior workers. Through O. S. Hubbard, assistant superintendent and director of research, opportunities for half-day work with pay in certain elementary school offices has been given to advanced commercial students. Those so placed are giving excellent satisfaction.

Persons desiring a report of the Fresno survey may obtain a copy by writing to the Division of Vocational Education of the University of California and asking for Bulletin No. 20, entitled, A Study of Vocational Conditions in the City of Fresno.

Junior Employment in San Francisco.—The median wage of the San Francisco Part-time School pupils is gradually rising, according to a recent report of the Junior Employment Service of that city. In January, 1926, the median wage was \$15.16, and a year later it was \$15.64. It was also reported that the number who find employment in trades and industries is increasing. On January 1 the classification of employment of pupils in the San Francisco Part-time School was reported to be as follows:

Field of Employment	Per cent	Field of Employment	Per cent
Trades	16.4	Transportation	13.2
Industries	19.4	Merchandising	23.8
Domestic and Personal Service	7.2	Commercial	20.0

Miss Ruth Turner is the employment secretary in this bureau.

Vocational Federation Banquet

At the December meeting of the Vocational Education Federation, Mrs. Susan M. Dorsey, superintendent of schools in Los Angeles, was introduced by W. S. Kienholz, city supervisor of vocational education. Mrs. Dorsey expressed surprise at seeing so large a group of people present, as she had not realized that there was such an army in the vocational ranks in Southern California as was present at the banquet.

The belief that the teachers engaged in vocational work are doing the very fundamental work of humanity was endorsed by Mrs. Dorsey. She continued as follows: "Before man had learned written symbols he had to use his hands; had to learn how to make things; had to make devices to hunt and track the game in order that he might live. As time went on, there were developed written symbols." So vocational education was the first type of education and modern machinery and methods are the result. The world is learning that if there is to be mass production, there must be mass instruction. Who is going to give this instruction? The schools are glad to give it. The vocational teachers should feel that they are among the most important of all the teachers in our great school system.

Mrs. Dorsey closed her remarks by expressing the hope that everybody would go away thinking, "My work is fundamental; we can't exist without it. I am glad I am in this work—it is the work for me."

Trends in Vocational Education

Ben F. Pearson, manager of industrial relations, Southern California Edison Company, was introduced as toastmaster for the evening, and he, in turn, presented Dr. Charles A. Prosser, director of Dunwoody Institute, Minneapolis, Minnesota. Dr. Prosser stated that whenever he gets an invitation to come to California he always accepts it. He said that he sometimes feels, when he comes to Los Angeles and when he goes away, that the name placed on its portals should be, "New Opportunity"—new opportunity for human achievement. He believes that here is the place where the educational problem can be worked out if it can be solved anywhere—the problem of really organizing education to serve all classes of people; "not only the needs of the sons of Mary, but the needs of the sons of Martha as well," as he expressed it. The movement for vocational education does not displace regular education, but by taking its place side by side with regular education, it helps to serve the needs of all people.

Dr. Prosser stated that there are trends in all movements, and enumerated a number of trends in vocational education. Among others he mentioned the trend toward using public money for those who have already gone to work. Dr. Prosser said, "The whole trend of vocational education is in the direction of training of people who have gone to work. We have, heretofore, spent all our money on pupils who are going to college, or on pupils who go to high school, and have abandoned the other young people just at the time in their lives when they need help most. We are having a fight to widen out the function of the public school to include those who must

leave and go to work." "There is a trend toward the revival of apprenticeship in this country. While many industrial concerns are organizing apprentice systems in their own plants, the smaller industries are taking advantage of the part-time work offered by our schools."

Put the Grease Where the Squeak Is

Dr. Robert L. Cooley, director of continuation and vocational education in the city of Milwaukee, talked on the "Vocational Needs of the Youth of Today." Dr. Cooley said that in any large city today, if you go out on a job and ask the carpenters where they learned their trade they will almost invariably say they came from Scotland or from Germany or, if they be Americans, they will say that they "picked up" their information of the trade. Very few journeymen are trained in our trade schools. At best no more than ten trades are taught in full-time trade schools, while people make their living in a thousand ways, in a thousand trades. "The great number of people going into industry today are not in our high schools," says Dr. Cooley; "they are out on the job now. When you give this training in full-time schools to full-time pupils you are not 'putting the grease where the squeak is.' There must be a combination of schooling and work. We are trying to make the initial experiences of the young people in industry educational as well as mere experiences in labor. We should not send them out after a tremendous investment in their elementary education and pay no attention to their other phases of development."

Our New Association

Dr. Edwin A. Lee, president of the American Vocational Association, spoke on the development of this new organization from its predecessors. He said, "Twenty years ago there met in New England a group of men for the purpose of promoting industrial education. They formed a society called the National Society for the Promotion of Industrial Education. That society undertook to promote a national program of industrial education for this country. They set about it in various ways, by holding a national meeting to which came a very interesting, enthusiastic, and earnest group of men and women, and by carrying on surveys of vocational education. They repeated the same program in Minneapolis, conducting and holding the national meeting around the findings for that city.

"In 1914, due to their efforts, Congress provided for a national commission on federal aid for industrial education. Dr. Prosser was a member of that commission. Through their efforts a bill was drawn up, which, after extended hearings, and with minor changes, became in 1917 the "Smith-Hughes Act" for vocational education. The national society meeting at Indianapolis at that time received word that the President had signed the bill, and the objectives which they had had in mind for many years seemed to be realized."

Dr. Lee then told the story of the reorganization of this pioneer body into the National Society for Vocational Education; of the development of a similar association, known as the Vocational Association of the Middle West;

and of the recent amalgamation of the two organizations into the American Vocational Association. Dr. Lee, who was a member of both associations, was chosen the first president at the meeting in Cleveland, Ohio, and was reelected at the recent meeting in Louisville, Kentucky.

Dr. Lee continued: "One of the fundamental principles of the A. V. A. was that there should be formed in every state, vocational associations which should affiliate with the A. V. A. At the March meeting there were no affiliated associations. In the interim between March and December last, when the first annual convention of the A. V. A. was held in Louisville, the efforts of the executive and other committees, aside from building up a program for the convention, were bent toward building up an affiliated membership. When the meeting was called there were gathered together presidents and delegates from 27 states, representing a membership of about 3300 individuals throughout the country. In addition to the 27 states that had affiliated associations, there were state directors of vocational education from all states of the Union except two, and, in addition, two representatives from Canada. Almost 800 people, gathered from all sections of the country, sat down to the banquet of that association. There was a spirit which I have not seen at many meetings in the past.

"Next December, the American Vocational Association is coming to Los Angeles for its annual meeting. It is coming here because it wants to give evidence to the West that the American Vocational Association is a *national* organization. It will come here with representatives from not 27 states, but from 48 states. Yours will be the responsibility for entertaining this Association. I call upon you to send those people back believing that the finest thing that the A. V. A. ever did was to carry its meeting to the West Coast. I know you will do it. Some will be called upon to serve on committees; others will be called upon to hammer, paint, saw, nail, etc. Do not hesitate to do what you are called upon to do.

"I hope it will receive, not only from vocational education, but from industry, from employers, and from associations, the thoroughgoing support necessary to make the meeting a success. I know that, too, will be forthcoming."—BENJAMIN W. JOHNSON.

California Journals on Vocational Education

The following publications, some weekly, some monthly, and some annually are published by part-time and vocational schools in California:

Annual Report—Frank Wiggins Trade School, Los Angeles.
Cooperation—The E. R. Snyder Continuation High School, Fresno.

Frank Wiggins Trade School Review—Frank Wiggins Trade School, Los Angeles.

Opportunity—Berkeley Part-time High School.

Part-time Mirror—Los Angeles Metropolitan High School.

Part-time News—Opportunity School, Huntington Park.

Part-time Topics—Sacramento Part-time School.

The Loudspeaker—San Francisco Part-time School.

The Spotlight—Faculty, Los Angeles Metropolitan High School.

The Vista—Long Beach Part-time High School.

Vocational Education News—Vocational Departments, Fresno.

Guidance Theme at Institute

By HERBERT F. CLARK

Guidance as an educational motive was given considerable impetus at the Los Angeles City Teachers' Institute in December, by an interesting guidance program given through the cooperation of the Vocational Guidance Association of Southern California, the Southwestern Educational Research and Guidance Association, and the Child Welfare Association of Southern California.

Vocational guidance as a factor in educational procedure was presented by Dr. Charles A. Prosser, president of Dunwoody Institute, Minneapolis, who in his usual vigorous manner, made some pungent remarks relative to the place of psychological tests in the distribution of students for vocational training. He expressed the idea that if a group of college professors arranged a series of vocational aptitude tests for blacksmiths, they would prove all blacksmiths to be morons; and if blacksmiths were to prepare a series of vocational aptitude tests for college professors, they would prove the college professors to be morons. He maintained that psychological tests, as now arranged, are purely academic, gotten up by academic minds and are hence unfit to determine vocational aptitudes.

Dr. F. C. Tuton of the University of Southern California discussed Educational Guidance and College Progress. He has made an extended study of college aptitudes and interests and has devised certain methods for sorting out college students on some rather definite interest basis. The chief advantage of this method of procedure, he maintained, lies in the fact that it gives the students themselves a better idea of their own interests and abilities and hence makes them consciously intelligent of the basis upon which they are operating.

The topic, Social Guidance Procedure and Community Welfare, was discussed by Raymond B. Dunlap, director of the department of Child Welfare and Compulsory Education of the Los Angeles city schools. The large scope of guidance activities involved in this department was indicated. Large numbers of children are constantly applying for work permits and serious attempts are made to aid them in finding the kind of occupation most suited to their needs.

Mr. Dunlap told of certain classes of professional children who are employed part time in the movies and at the same time given instruction and supervision by competent teachers in the ordinary school subjects. Not only does the work of this department involve careful supervision of this group of children, but it also has to do with thousands of problem cases. The Child Welfare Department, according to Mr. Dunlap, conducts a psychological clinic at which hearings are given to ascertain whether or not certain children should be brought before the regular courts. This pre-court hearing prevents at least ninety per cent of cases, which otherwise would receive a court record, from appearing in court at all. Parents are brought to the clinic, and certain family and community investigations are made; in nine cases out of ten the matter is then adjusted without court attention.

Herbert F. Clark, an assistant director of vocational education in the Los Angeles city schools, and president of the Vocational Guidance Association of Southern California, was the presiding officer.

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Trade and Industrial Education Agriculture Education

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A. V. A. to Meet in California

Plans are already on foot for the first meeting on the Pacific Coast of a national vocational organization. Los Angeles is the city chosen for the 1927 convention of the American Vocational Association. The committees have been appointed, the Biltmore Hotel has been chosen as the official headquarters, and the date has been set for December 17 to 20.

If the Louisville meeting last December is a criterion, the Los Angeles meeting will be one that no person interested in the most progressive developments in education can afford to miss. If you have paid your dues to the C. V. A. you have received the February number of the *News Bulletin* of the American Vocational Association and have read about the Louisville convention.

General and sectional meetings were both provided on the program and, as always, the best part was the informal talks at luncheons or in the hotel lobbies of kindred spirits over problems of common interest. Some of the highlights of the sectional meetings are given below:

A Larger Outlook in Agriculture

"Until very recently our program has dealt largely with the promotion of an all-day school program. Some of us have felt a responsibility for a wider program, one which shall touch all phases of the agricultural industry. In an effort to expand the program contacts have been made with a number of individuals and agencies which are responsible for leadership in the development of a nationwide program of agricultural improvement."

Part-Time Work in Agriculture

"While the number of part-time agricultural schools has not increased as much as could be expected from the promotional efforts expended, the total for last year being 445 schools in twenty-five states with an enrollment of 6489, we feel, nevertheless, that distinct progress has been made in this field. In the first place there is a better understanding on the part of supervisors and teachers of the nature and needs of the group to be served. For a number of years there was considerable confusion as to what constituted the essential differences between part-time and evening-school work. Now we believe that arbitrary definitions have been largely abandoned and that we can recognize a member of the agricultural part-time school group by the following simple characteristics: A person out of the regular school system, employed on a farm or having access to farm practice facilities, usually immature and deficient in schooling, not yet established in farming on his own responsibility but having this as an objective."

Home Management

The home-economics section discussed the training of leaders in the field of homemaking education, home improvement as a result of school instruction, and adult education in homemaking. Ivol Spafford, state supervisor of home economics education in Alabama, said:

"It is a foregone conclusion with all home economists that courses which deal only with the productive phase of homemaking must not only continually change in content and emphasis, but that they are very rapidly failing to meet the vital needs of the homes of citizens. Where the rapidly moving trend of lessons of productive labor in the home will stop cannot be definitely foretold, but the management of the home and the family, and the care and training of children, will continue as long as the family continues as a social and economic unit."

Do You Know Business?

The commercial-education sections asked themselves many questions regarding the people they were trying to educate and the occupations for which they were giving training. These questions centered about the general education necessary for the young worker in business, promotion in business, the kinds of business training needed for various business positions, the place of the commercial teacher in relation to the business organiza-

tions in the community, business attitudes, employment methods, wages, sex differences, and upgrading through evening schools.

Industry Is Heard

The section on industrial education had speakers from a number of the large corporations which are doing outstanding work in industrial training in their own plants. This led naturally into a discussion of the training of foremen in industrial plants to use up-to-date educational methods in their work of training the new workers under them.

Vocational Guidance

Guidance programs for all schools including the college were discussed. Dr. Iva L. Peters, dean and director of personnel for women at Syracuse University, indicated the staff, the research, and the cooperation needed among departments in a university to provide the needed data upon which a personnel department could give adequate advice to students.

Part-Time and Evening Schools Differ

The committee reporting on the training of part-time and evening-school teachers came to the conclusion that more attention should be given to the training of both groups of teachers, but "That the problems of part-time and evening classes should be dealt with separately, according to the needs of the group to be reached."

Educational Leaders on Program

Dr. Robert J. Leonard, formerly director of the Division of Vocational Education at the University of California and now director of the School of Education at Teachers College, Columbia University; John J. Tigert, commissioner of education of the United States; Dr. William T. Bawden, associate superintendent of schools, Tulsa, Oklahoma; Dr. William J. Bogan, assistant superintendent of schools in Chicago; and Dr. Harry D. Kitson, of Teachers College, Columbia University were among the convention speakers.

The banquet and dance were attended by about 500 guests. Dr. Edwin A. Lee, the president, presided at the banquet. It was found that many of the charter members in the initial movement to form an organization to advance vocational education in this country were in attendance at this first banquet of the newly organized American Vocational Association, and they were asked to stand and receive the applause of the assemblage.

National Committees

The chairmen of the standing committees appointed were as follows:

- Agricultural education—J. D. Blackwell, state director of vocational education, Maryland.
- Commercial education—F. G. Nichols, associate professor of education, Harvard University.
- Home-economics education—Beulah I. Coon, assistant professor of home economics, University of Chicago.
- Part-time education—Lewis A. Wilson, state director vocational education, New York.
- Rehabilitation education—C. B. Gwynn, state supervisor of civilian rehabilitation education, Indiana.
- Trade and industrial education—L. A. Emerson, principal, Essex County Vocational School for Boys, Newark, New Jersey.

Vocational guidance—A. H. Edgerton, professor of industrial education and chairman of courses in vocational guidance, University of Wisconsin.

For the special new committees the chairmen are as follows:

Adult education—Anna E. Richardson, American Home-Economics Association, Washington, D. C.

Cooperation with industry—William J. Bogan, assistant superintendent of schools, Chicago, Illinois.

Industrial arts—William E. Roberts, supervisor of manual arts, Cleveland, Ohio.

Industrial education for women and girls—Elizabeth Fish, principal of Vocational High School, Minneapolis, Minnesota.

Teacher training—Robert H. Rogers, Milwaukee Continuation School, Milwaukee, Wisconsin.

Publicity—Howard L. Briggs, director of the department of vocational and applied arts education, Cleveland, Ohio.

Legislative Committee at Work

At the mid-year meeting of the Part-time Education Council of the Bay Section, California Teachers' Association, a legislative committee was appointed to see that a bill amending the Part-time Education Act should be framed and fostered. Morris E. Hurley, principal of the Oakland Part-time High School, John E. Carpenter, principal of the Sacramento Part-time High School, and George Mann, principal of the Berkeley Part-time High School, have been at work since January on this committee.

The December meeting of the Part-time Education Council was well attended and the speeches from many different points of view all tended to bring out solutions for some of the adjustment problems, social and educational, with which the part-time schools are dealing.

Dr. Edwin A. Lee spoke on the general subject of the part-time school as an adjustment department for the public schools; Mrs. Margaret Nedderson spoke on the graduation program of the San Jose Part-time School and the assistance it had been in building up the general tone of the school; Mary Meeredy of Crockett, who is both counselor in the full-time school and director of the part-time department, spoke of the plan of organization of the very small part-time school and its adjustment function in the whole high school.

The importance and function of an employment bureau as a department of the part-time school was discussed by Mignon Harmon, placement secretary of the Oakland Part-time School. The method of coordination in a city part-time school where each teacher's time is budgeted for a certain amount of coordination activities was outlined by Burton Burdick of the San Francisco Part-time School.

A comparison of the California Part-time Act with similar acts in other states and suggestions for changes in the California Act were made at the close of the program. A motion was made that a legislative committee be appointed as indicated above. Officers for the ensuing year were elected as follows: president—Morris E. Hurley, Oakland; vice-president—Mrs. Emma M. Baird, Santa Rosa; secretary—Donald Biery, Berkeley.

Cooperative Trade Training in a Large City

By ROBERT W. HAMBROOK

"I suppose it will be our duty to help the boys," answered Walter T. Brown, head foreman of the Los Angeles Railway Shops, when P. B. Harris, chief engineer, first asked him for an opinion on the cooperative machine-shop training which had been requested for our boys. A few weeks later Mr. Brown said that practical experience had completely changed his idea of cooperative training, and had convinced him that this method of learning a trade not only benefited the boy, but fully compensated the employer. "As far as we are concerned," said Mr. Brown, "the experiment is a complete success." Whereas a few months ago it was hard to push the cooperative plan of vocational education for the machine shops of the city, today the machine shops are doing the pushing.

Near the end of last summer session it was suggested that the John C. Fremont High School might be an appropriate school in which to begin the cooperative type of training in Los Angeles. The following day the matter was discussed with W. L. Richer, principal of the John C. Fremont High School, and he was asked what he thought about starting some of this work in September, or at some more distant date. The smile which his faculty knows so well preceded the typical remark, "Are you going to have any time before school begins?" Immediately we began making our plans for cooperative training. William S. Kienholz, director of vocational education in Los Angeles, gave us his full support, and helped us in our arrangements. Then our survey of the industrial field was started.

At first an attempt was made to secure one establishment, if possible, for all the boys, thus making it easier for us to take care of them. It appeared, however, that the Los Angeles machine shops were not ready to carry out this plan as yet, and that possibly better results could be obtained by dividing the boys into small groups and placing them in various shops; then, by comparing notes and perhaps changing them periodically on the "district apprenticeship plan," the boys would secure a wider experience than could be obtained in any one shop alone.

It was necessary to set up certain standards before making definite arrangements with any concern. The shops should be either within a short distance of the school, or be readily accessible by street car; they should be clean and of modern construction that they might be conducive to health; the men in charge of the shops should maintain a favorable attitude toward the boys.

As is so often the case in selling, we had no difficulty with our first employer, who said he would take two boys. The next employer did not care to give a definite answer immediately; others offered many kinds of objections, or refused to consider the matter at all. A small number said they had no place or time for boys. A few looked agreeably on the plan, but when their plants were examined it did not seem wise to have our boys work under such conditions. Two or three of the plants gave the impression that they were likely to employ several boys, but took only one pair when we actually began operations. In several cases it was necessary to make a number of

trips before receiving a final answer, and in one instance twenty-four calls were made at the office and plant before the boys went out on the job. This latter concern brought up every possible objection before accepting the plan, but now they are among our best boosters for cooperative work. A week or so ago, it developed that the directors of one company had been discussing the adoption of an apprenticeship system a few days before the cooperative plan was proposed, but this program has solved their problem.

The greatest objection to be met was the training of two boys to do the job of one, but this difficulty was later solved by having the boys meet on Saturday mornings so that the boy then working on the job could train the boy who would come to work on the following Monday.

On the first day of school the plan was announced, with an explanation to pupils who might be interested, that a boy would spend one week in school and one week out in some machine shop, serving an apprenticeship and receiving pay. The response proved rather meager at the beginning. This was due, in part, to the fact that the John C. Fremont High School entered its third year only last September, and until this year had been handicapped by having not much more than the promise of a machine shop. Recently, however, we moved into a new building and now have the finest school machine shop in the city of Los Angeles. As yet, however, there are very few boys in the school who have had much machine-shop training. Gradually the class enrollment increased, but some of the boys proved unfitted for the work; the promising ones were retained until we decided on those whom we could pair evenly.

As soon as the boys were ready, they were sent to secure work permits, which allowed them to be employed forty-eight hours every two weeks. Finally, ten boys were started on the job; two at the United States Electrical Manufacturing Company, makers of the well-known "U. S. motors"; six at the Emeco Derriek and Equipment Company; and two at the Coast Oilfields Supply Company. A week later, two boys started at the Wiley Machine Company; in a few days two more entered the Los Angeles Railway Shops; and a month later two boys began work for the Centerless Grinder Company. As other boys show ability we expect to place them in industry on the same plan. Our problem now does not concern itself so much with finding the job as it does with finding the suitable boy. We plan to find the boys by means of systematic testing and training.

It has become apparent that school work forms no criterion regarding the quality of work a boy may do elsewhere; that sometimes the restless, uninterested boy in school may be the greatest success at work, and that the satisfactory pupil in school may prove unsatisfactory when he is sent out on the job.

In starting this plan of training, a simple, definite objective was decided upon: to train the boy so that at the end of his apprenticeship he would be able to secure a job and hold it. In order to carry out this aim, we con-

sulted constantly with men in industry. Without doubt, some of the boys will become foremen or superintendents, or will occupy some of the other higher positions in industry, but our main object is to help the boy who will spend his life at the machine or at the bench.

Our job in school is to supplement the training the boys are receiving in the plants. The making of shop sketches, the reading of blueprints, and the making of complete drawings when necessary are taught by George C. Wright. Frank D. Olney brings science and mathematics to apply to the problems of the shop. Mrs. Helen Crow Sample gives instruction in English by linking it to their interests in shop, school, or avocation. The English is more than merely vocational because it is broadened until possibly it includes most of the "seven cardinal principles of education."

That the training on the job might be recognized, a state teacher's credential was secured for a selected individual in each machine shop that the boys might receive as much instruction as possible in the shops and also be credited with full-time attendance in school.

The short experience with cooperative work has already shown us that it is the simplest and best method of teaching a trade. There are no discipline problems among these boys; their attitude is that of the learner; they have a new confidence in themselves; they are out working among men and can talk in trade terms; they see many other machines besides the ones in our school shop; they are already linked up with the trade. When their apprenticeship is over we hope they will not be so likely to leave the job and resort to driving a truck, as so frequently happens at the end of the regular vocational courses.

Among individual students results are already appearing. One boy received a raise of five cents an hour after actually working only three weeks on the job. Another boy, whose father died after the lad had worked only six weeks, had to leave school to help support his mother. The company gave the boy a permanent job and doubled his pay because he had done well in all the work assigned to him. This boy now attends night school to secure part of the instruction he wanted to receive on the cooperative, part-time plan.

The boy, the employer, and the instructor each benefits from this type of education. The instructor, acting as his own coordinator for one and one-half hours a day, comes in contact with the most modern shop methods. No longer can his classes turn out students in "coffee mill" fashion. He must be on tip-toe to fulfill the needs of the industry.

In the future cooperative students will be full-time in school for their first year, or until they are sixteen. During this year (or more) one-half of their day will be used for trade training.

An expansion of this type of vocational training is expected. E. B. Dale, instructor in automotive principles and practice, plans to begin cooperative work in the spring. Frank Cushman, chief of trade and industrial education service for the Federal Board for Vocational Education in Washington, D. C., and in Los Angeles on a year's leave of absence, and W. S. Kienholz, city director of vocational education, arranged a conference with

Ralph H. Beauchamp, special representative of the vice-president in charge of operations of the Union Pacific Railroad, as a result of which thirty-six apprentices will begin their first year's machine-shop training on the cooperative plan.

Cooperative Education in Small Communities

Considerable state-wide interest has been aroused among the vocational educators on the form of cooperative vocational training which was started this year in the Fort Bragg and the Manteca Union High Schools. In the former school the work was organized by Roy Goode, district superintendent of schools, and J. S. Cotton, principal of the high school. The work at Manteca was organized by Principal George I. Linn. In starting this work, the organizers in each school were aided by the state department of vocational education.

In each school there are approximately fifteen boys and girls, for the most part juniors and seniors, who are spending at least half of their school time in the local industries and commercial business houses. These cooperative establishments were selected for the advantages they possessed for vocational training and for the high quality of their management.

In each place where high-school students are assigned for training, an individual who meets the state requirements for a vocational-arts type of credential is certificated and employed by the school. He is responsible to the proper school authorities for the conduct and training of the students. The high-school principal, or his representative, acts as coordinator to relate the high-school courses with the practical work of the students. This phase of the work is barely touched at present, but will be more thoroughly organized later.

The students receive only two units of credit per year for the applied work toward the 16 units required for high-school graduation. A checking of this work made by the state department of vocational education several weeks after the work was started, revealed a cooperative attitude on the part of the industries, the academic teachers, and the school authorities. Rapid progress was shown by the students themselves toward gaining an economic foothold on life.

Other small communities in the state have indicated an interest in organizing similar groups as a part of their vocational program.—B. E. MALLARY.

NATIONAL HONORS COME TO CALIFORNIA

A number of national educational organizations have selected as their presidents California men. Dr. Edwin A. Lee was elected president of the American Vocational Association for another year; Commissioner Nicholas Ricciardi was elected president of the Association of State Directors of Vocational Education; Superintendent Joseph M. Gwynn of San Francisco was elected president of the Department of Superintendence of the N. E. A. at its February meeting in Dallas, Texas; and Dean W. W. Kemp of the School of Education of the University of California was elected president of the National Society of College Teachers of Education.

Homemaking Education in Federal- and State-Aided Classes

By MAUDE I. MURCHIE,
State Supervisor of Teacher-Training Courses in Home Economics.

Vocational education in homemaking for girls over fourteen years of age provides instruction in all of the important responsibilities of the home, in addition to certain academic instruction, including English, citizenship, mathematics, music, home art, and home science. The course is adapted to the needs and capacities of the individuals of the group, and is rapidly gaining recognition in small communities as a highly commendable type of instruction for one or two years of a four-year curriculum; and is recognized as particularly desirable for girls who will not complete a high-school course.

These groups of students are maintained as separate classes in all subjects in so far as possible, in order that the type of education best suited to the group may be assured. The outstanding promotional features of the vocational program for girls of high-school age are: (1) the recognition of homemaking education as basic in the education of girls and women; (2) the enriching of homemaking courses to include instruction in all of the important responsibilities of the home; (3) the organization of this instruction in a course of one or two years in length, instead of distributing the content throughout a four-year period, when statistics show that practically fifty per cent of the enrollment of the high school will have left the public-school system as full-time pupils by the close of the tenth year; (4) the modification of the usual academic courses to meet more definitely the capacities and interests of the individual student.

Although for the year 1924-25 the state showed an increase of \$8656.94 for homemaking education over the allowance for the preceding year, it was necessary to pro rate the claims so that they might come within the twenty per cent limitation for home economics in the Federal Act. The total claims for full-time day classes for girls and part-time classes for women for the year 1925-26 amounted to \$55,388.16, and the fund available to meet the same was \$51,941.66.

When the aims of this course of instruction are better understood by the public it will receive recognition as a basic requirement in the education of girls in many schools. There is an increasing interest in the plan in rural communities from year to year.

The next step in progress will probably be the establishment of cooperative supervision between the teacher-training institutions and the public schools through which a plan for itinerant teacher-training will eventually develop.

Part-Time Vocational-Extension Instruction in Homemaking for Women

Classes in homemaking for adult women are held for a minimum of four hours per week as special day classes. Instruction may be provided in any phase of homemaking, including courses in child care and training, home art, nutrition, business law, and home accounting, as well as courses in food preparation and service, and home sewing

and the study of dressmaking. These classes first gave to women the opportunity to secure educational service from the high schools in the day time, rather than at night. Most women who are not engaged in gainful occupations can attend class most conveniently in the afternoon hours.

It is not difficult to organize classes in millinery and dressmaking, since the housewife can make a very substantial contribution to the family budget by personally providing the clothing of the family. With such training, many women have entered the occupations of dressmaking and millinery as wage earners.

Although the school authorities recognized the need for organized instruction in child care and child training, and considerable promotional work was done to accomplish this end, the lack of teachers prepared to recruit and instruct mothers satisfactorily in this important responsibility made it impossible to organize an acceptable program of instruction.

Home-Economics Teacher Training

Therefore, two years ago, in 1924, the State Plan for Vocational Education in Home Economics was modified in an attempt to extend the teacher-training facilities of certain institutions to include the definite preparation of teachers of adult and part-time education through the project of child care and child training in connection with the vocational project of training experienced homemakers as home-economics teachers.

This plan involves the adjustment of content in special education courses, the establishment of adult classes for practice teaching in connection with the institutions, the inclusion of a nursery project or a substitute, and a revitalizing and refocusing of the content in homemaking courses, as well as a study of assembling and using the community forces to this end and practice in doing it.

Since the organization of the state vocational program in 1917-18, many women who are experienced homemakers have been trained as home-economics teachers. They have been carefully selected as to homemaking ideals and ability to do creditable college work. They have proven themselves capable students and efficient teachers. It is in connection with the training of these women that the child-training and child-care project is being developed. Many of these women have had maternal experience. A special effort has been made to adjust the training to their homemaking experience. From time to time experimental work is maintained in the measurement and evaluation of the homemaking experience presented by the group in training. This plan is now in operation in the state teachers' colleges at San Jose and at Chico, and in the University of California at Los Angeles.

At Chico State Teachers' College a special study of measuring the homemaking experience and adjusting the instruction to the same was made in a foods course set aside for this purpose. The results of the experiment were encouraging and the problem will be further developed.

A baby clinic and nursery center in the city were used for child-care work. A special course in vocational education, including part-time and adult education, was introduced and is now required of all students preparing to be home-economics teachers.

At San Jose State Teachers' College a similar course in education has been organized and is required of all students preparing to be home-economics teachers. This course has been offered during the summer session for two years. Here contacts were first made for training and observation with the nurseries, clinics, and orphanages of the community. This year the development of the work made it possible to equip and organize a nursery laboratory in the institution with children under three years of age. The youngest was nine months old. The plan provided for carrying the training into the homes of the children. Next year a class of mothers will be organized in the institution for observation and practice-teaching purposes.

In the University of California at Los Angeles, a special course in education was introduced; also one in child care. Contacts were made with the adult and part-time work of the city public-school system, for observational purposes for students in training. Practice-teaching facilities in home economics were arranged in one of the large city high schools. A second high school has requested similar cooperation by offering its facilities to the institution for practice-teaching purposes.

The college will probably take the next step this coming year to organize an adult class in the institution as a part of its practice-teaching equipment. After these centers are firmly established in the teacher-training centers, educational service of a similar nature will be offered to the teachers in the field.

Summer-Session Program

In addition, considerable attention has been given to the development of summer-session programs in certain institutions, and vocational funds have been applied for the support of this work. Special attention has been given to the development of more comprehensive courses in education, dealing with the vocational aspects of homemaking education, to the development of courses in home art, and, in general, to the building up of summer-session programs to meet the recognized needs of the teachers in service.

Future Development

These plans, when better understood and developed to their maximum possibilities, should enable the teacher-training institutions to turn out home-economics teachers with experience and training who should develop as leaders in the solving of homemaking problems, particularly child care and child training, and who will be effective in so far as institutions and individuals outside the home can function from this standpoint. Teachers prepared by direct participation in actual problems in part-time instruction for minors, in home-economics instruction dealing with the most fundamental duty of the mother, child care and training, and in homemaking instruction for adults should go out better prepared to cope with the educational problems of the California school system than ever before.

Sectional Conferences on Agriculture

The state department of vocational education arranged a series of conferences for agriculture teachers during March and April. The north-coast section, which extends north from San Francisco and includes Napa, Lake, Sonoma, Mendocino, and Humboldt counties, met at Middleton. About forty-four agriculture teachers attended this conference.

Another conference was held at Kerman Union High School for the San Joaquin section, which includes all counties north of the Tehachapi to San Joaquin and counties east of the Coast Range. About thirty-eight agriculture teachers were in attendance.

The southern section includes all counties south of the Tehachapi and the conference was held at the Southwest Museum in Los Angeles. Asilomar was the meeting place for the south-coast section. The counties participating were those south from San Francisco and Oakland, taking in all those west of the Coast Range.

The Sacramento valley section met at Lodi. This section includes all counties from Sacramento county north to the Oregon line and counties east of the Coast Range. These conferences are held for the discussion of the reorganization of the work according to the new state plan and for the development of a score card for the program of work.

The annual state conference will be held on the campus of the University of California on July 1 and 2, with Charles Perrin, president of the state organization, in the chair.

Agriculture Classes for Farmers

Following the closing of an evening class in dairying which ended with a banquet, the annual course in orcharding, which was initiated last year in the Gonzales Union High School District, was this year organized in the King City Union High School District, where Ralph N. Brown is director of vocational agriculture. This class was organized as a cooperative arrangement between the two school districts and was this year held in the grammar school building at Greenfield. Eleven meetings of the group were held and the average attendance was twenty-nine. The topics discussed were adaptability of fruit culture to Salinas valley, pruning, wiring of trees and tree surgery, orchard pests and their control, irrigation, cultivation, packing, and marketing. The class closed Saturday, February 26, and will next year be given again in the Gonzales Union High School through the cooperation of the two districts.

Evening classes in poultry production or keeping were begun in January by a number of schools, among them Fortuna, Gilroy, and Santa Rosa High Schools.

Open House in Agriculture

The departments of agriculture of five high schools in the Sacramento valley were open for inspection on Friday, March 11. Marysville, Woodland, Fair Oaks, Lodi, and Elk Grove were the hosts to the other agriculture teachers of the section and the visiting day proved to be very profitable for both the hosts and the visitors.

Shall We Build a Separate Part-time School?

In the large city there is only one answer to the question of the separation of the part-time and full-time high schools; in the smaller community it is a distinct problem. Huntington Park, which is fast leaving the small-community stage, is struggling with this problem and has just completed a survey of opinion throughout the state on the subject.

According to the replies from 43 of the 57 part-time schools of the state the part-time school should have a distinctive name; 'Opportunity School' was the most popular name on the list. One suggested that Roosevelt High School, Edison High School, or Lincoln High School was better than a name which attempts to be descriptive of the school.

Close connection of the part-time school with an enrollment of from 250 to 1000 pupils with the regular high school for administrative purposes was considered as undesirable by 37 out of 43 replying; 30 of these felt that the separation should be complete so that the two schools should not be on the same grounds. Separate buildings, grounds, and equipment should be provided in the opinion of 38. Shops, an auditorium, and a gymnasium were considered a necessity by all but three or four. There was almost unanimous agreement that the classrooms should not be of the conventional type, but should be adapted to 'round-table discussion' and to laboratory work.

As a result of the survey conducted by the Huntington Park Opportunity School, the following recommendations were made to the board of education:

The part-time or opportunity school should be as different from the regular full-time school as is possible and practicable. This difference should appear in (a) the attitude of the director and teachers, and (b) in the building and interior decoration.

The building should be different in external appearance. It should more nearly present the appearance of a club.

The classrooms should be different from those of the regular school, with rather small blackboard space, tables and chairs, and window boxes for flowers. The general appearance of the room and its atmosphere should be that of the home library or den.

Library space, as well as filing space, should be provided in each room in addition to a central library close to the office.

Each room should be provided with a small conference room for the use of the teachers teaching in that room, since much individual counseling is necessary.

An assembly room of suitable size should be provided, which can be converted and used for gymnasium work, and adjacent to the home-economics department, so that kitchen service can be conveniently provided for social occasions.

Entirely separate shops, with washroom, should be provided in an adjoining unit.

In this type of school large office space in proportion to enrollment is needed, due to increased supervision, more abundant records, the attendance bureau, library, and the like.

A girls' restroom should be provided close to the home-economics department, or as part of it, so that the teacher in charge can supervise it.

A suitable conference and workroom should be provided for the women teachers, and a similar room for the men.

The commercial rooms should be close to the office, with a small room between for mimeographing, storing, filing, etc.

A vault should be provided in the office suite.

Ample shower and dressing-room facilities should be provided for the assembly-gymnasium.

Just outside the building, a handball court, and a court suitable for volley-ball, basketball, and indoor baseball should be provided.

Location. The committee sees the following disadvantages in having the Opportunity School near the regular high school:

1. The part-timers need to be in a position to start over again with a clean slate, after their failure in the regular school. When a man fails in business, he does not move next door to try again.
2. Such a location near the high school is too far from transportation in Huntington Park. This is an important item, since most of these children must either get to work, or to school from work, on time.
3. The two schools (the regular high and the part-time school) being so entirely different in purpose and in fact, hamper each other when they are close together, making cooperation more difficult.
4. Due to the different hours and schedules of the regular high school and the Opportunity School, the difference in attitude on the part of the teachers and pupils, and to the differences in needs of the pupils, it would be impossible for these two schools to use the same athletic and physical-education teachers and equipment, even should the schools be contiguous.
5. Unauthorized contacts between part-timers and the regular students, boys and girls, are a detriment to both. Those familiar with the problems of adolescent youth will appreciate this.

The committee believes that a location on some side street somewhere near Randolph and Pacific Boulevard, North or South, would be most satisfactory, provided the cost of a site in this neighborhood would not be prohibitive. The committee estimates the amount of money necessary to provide such a school, built and equipped to serve the future as well as the present, and to reflect credit on the community, to be about \$50,000, not including the site.

Part-time Work Prospers

Pittsburg opened its first part-time-school classes for boys last year under the direction of George Engs, who is now in the Oakland Part-time School. The school grew from a handful of boys who met in a room in the city hall to a group of over one hundred pupils who built their own clubhouse and schoolroom.

This year the work for boys is being continued under the direction of J. Harvey McCammon, and classes for girls have been initiated with Mina Ames as instructor. Over sixty girls have been enrolled in this department. English, hygiene, foods, and clothing have been the subjects taught. By the end of the first term, ninety-two garments had been made; these were chiefly aprons, slips, underwear, and wash dresses. The home-arts class made the curtains and draperies for the practice house in which the girls receive the instruction. Table runners, cushion covers, lamp shades, towels, sheets, and pillow slips were also made by the classes.

Basketball and baseball are special attractions for the boys of the school. Mr. McCammon has built up teams which have competed with a number of others in the district.

Pittsburg is to be congratulated on the success it has had during the year and a half in which the part-time work has been organized.

Agriculture on the Air

Julian A. McPhee, state supervisor of agriculture education, had charge of a program over KGO on April 6. The agriculture departments of four high schools were asked to cooperate and the boys of Santa Rosa, Woodland, Ripon, and Watsonville had their first experience in broadcasting. They told of the projects they had conducted under the supervision of the agriculture departments of their high schools.

Twice a month, over KQW of San Jose, a program on vocational agriculture education is being broadcasted. To carry the message in an even more concrete way the T and D theatres have put on two reels on vocational work in agriculture. As a result, there should soon be a widespread knowledge of the type of work which can be accomplished in agriculture in the high schools of the state.

New Books to Read and Use

Exploring the Manual Arts, by John F. Friese (Century Company, 1926, list price \$2.25). As in the junior high school, the problem of the part-time school is largely one of exploration and guidance. The author of *Exploring the Manual Arts* has written a book primarily for the junior high school. It includes a discussion of methods and subject-matter in general, then a discussion of the teaching of art in industry and its appreciation, a discussion of vocational guidance through the study of occupations, illustrations of the teaching of technical information related to the manual arts and of the teaching of vocational economics. The project method, the technique of starting a class, and the organization and administration of manual-arts instruction were also treated. The appendix contains illustrative units of instruction.

Job Sheets in Practical Woodwork, by A. G. Brown and F. E. Tustison (Bruce Publishing Company). The authors of this new set of job sheets have previously published a set called *Job Sheets in Home Mechanics*, which proved so popular that this second set was added. These sheets are not intended to eliminate the need for a teacher, but to allow a flexibility of instruction and individual progress such as is impossible if directions must be given to an entire class at the same time.

The jobs are arranged, so far as possible, in order of difficulty and have been selected to teach the fundamental tool processes and fall within the field of interest of the junior-high-school boy. There are 31 job sheets in the set, which is intended to make a year's work. The job sheets are on heavy book paper punched for notebook filing and come in a manila envelope.

Job Sheets in Home Mechanics, Set No. 2, by F. E. Tustison (Bruce Publishing Company). Sixteen additional job sheets in home mechanics have been added to the author's first set. These include six or seven different types of production or repair jobs about the home. As in his other job sheets, Mr. Tustison has excellent drawings and cuts showing the parts and processes.

Wallpaper and Wallpaper Hanging, by Charles L. Young (Century Company, \$5.00). One of the trades which has a decided shortage of skilled workers is paperhanging. In the Century Vocational Series is a book containing a

complete treatment of the whole subject of wallpaper and its hanging, including the selection and estimating of paper, the preparation of the surface to be covered, the technique of hanging the paper on different surfaces, the problems presented by different types of papers, etc. The text is concrete and well-illustrated, and contains a section on job-instruction sheets for the trade.

Handbook for Bakers, by A. F. Gerhard (Century Company, \$5.00). Another book in the Century Vocational Series deals with the baking trade. A discussion of the raw materials used in baking, the equipment necessary, the technology of breadmaking and pastry decorating, shop management, and a listing of over 150 pages of recipes for the manufacture of sweet goods are given.

The Young Delinquent, by Cyril Burt (D. Appleton and Company, \$5.00). The author is professor of education in the University of London, psychologist in the education department of the London City Council, and the author of *Mental and Scholastic Tests*. The *Young Delinquent* is the first of a series of three books and deals with the child whose failings are moral. The two books to follow will have to do with the backward and the nervous child. The *Young Delinquent* is a book with which every worker with children should familiarize himself. Delinquency will decrease only to the extent that it is treated at the earliest possible stage. The author emphasizes particularly the pre-school and adolescent periods.

This study covered a period of ten years and included careful investigations of family history, developmental conditions, environment, school and employment records, personality development, mental tests, a psychiatric examination, and careful attention to the child's own story. Various procedures have been evolved through the actual handling of cases which should prove valuable to parent and teacher.—E.D.E.

Educational Opportunities for Young Workers, by Owen D. Evans (Macmillan, \$3.00). The author of this book has a right to be heard on the subject indicated. He was principal of the Boston Continuation School and later was state supervisor of continuation schools in Pennsylvania. To quote from the introduction: "The purpose of this book is to trace the historic development of educational opportunity for employed youth; to show the needs of this group today; to describe existing opportunities for meeting these needs; to discuss the relative efficiency of these opportunities, portraying some types of successful agencies; and to suggest where emphasis should be placed in the educational program of the near future."

The book includes excerpts from many unpublished studies of the young worker, as well as references to published studies, which makes it a very valuable book for research workers, teachers, and administrators. It brings together in one volume the most salient points which have come out of studies of the young worker during the last ten years. It is divided into three parts. Part I shows the development of education for the young worker from apprenticeship among the ancients to the present Smith-Hughes Bill. Part II deals with the characteristics of young workers. Part III is devoted to the various educational opportunities offered to the young worker—cooperative, apprentice, evening, and continuation schools. This part includes a very fine chapter on guidance.—E.D.E.

INDUSTRIAL CONFERENCES HELD

The state department of vocational education cooperated with the state Y. M. C. A. and the officials of the Pacific Coast railroads to make the Pacific Coast Young Men's Railroad Conference a success. This conference was held in Sacramento, January 22 and 23.

Commissioner Ricciardi organized a group of men, leaders in the state, to serve as a body of counselors for the young men who attended the conference. Fully half of the time of the program was spent in vocational conferences. Inspirational addresses were given by Cameron Beck, director of personnel work in the New York Stock Exchange, R. H. Beauchamp, special representative of the vice-president of the Union Pacific Railroad, and others. L. B. Travers, assistant supervisor of industrial education in Oakland; George C. Mann, director of vocational education in Berkeley; Benjamin E. Mallary, supervisor of classes for the training of trade and industrial teachers, University of California, Berkeley; George F. Haller, head of department of vocational education, Crockett High School; R. J. Springall, head of the electrical department of the Sacramento High School; H. C. Slater, instructor of apprentices, Southern Pacific shops, Roseville; John E. Carpenter, principal of the Sacramento Part-time High School; J. F. Overturf, assistant superintendent of schools, Sacramento; Frank C. Vincent, head of department of vocational education, Sacramento High School; and John R. Alltucker, vice-principal, Exeter High School were conference leaders. The subjects varied with the different conference groups, but were for the most part in the field of vocational success and training.

The delegates are young men employed in the various branches of the railway service in the railroads which cover all the Pacific Coast states. The conferences are held annually and are a source of inspiration for the young men who attend and who, in turn, carry back to their own organizations constructive ideas of value both to the employees and to the railroads.

At the same time, under the leadership of the Oakland Y. W. C. A., a conference was held in Asilomar to consider the problems of the woman in industry and the responsibility of the Y. W. C. A. in the problem. Personnel administration, employment management, recreation, women's clubs, employed girls' clubs, and adult education were among the interests represented at the conference.

Richard Neustadt, secretary of the retail merchants' section of the San Francisco Chamber of Commerce, made the opening address and spoke from the point of view of the employers. He showed the problem of the employer in relation to the training, promotion, tenure, and personnel work for the woman in industry, making many challenging statements and forcing each person in the group attending the conference to evaluate his own stand toward the problems involved.

The younger woman just beginning her industrial work who is in attendance in the part-time school came up for consideration at each session, as it became evident that among this group are the greatest needs for vocational training, for recreational and avocational training, for personnel work, and for civic training.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE

UNIVERSITY OF CALIFORNIA AND THE STATE BOARD OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 1. Leaflet No. 1. A First Reading List for Administrators and Teachers in Part-time Schools. August, 1920. (Out of print.)
- No. 2. Leaflet No. 2. The Work of Coordination in Part-time Education. November, 1920. (Out of print.)
- No. 3. Bulletin No. 2. An Analysis of Department Store Occupations for Juniors. December, 1920.
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Backward and Forward

By EDWIN A. LEE,

Director, Division of Vocational Education, University of California.

When the history of the development of vocational education in California is written many documents hitherto unknown, except to a limited few, will assume a position of major importance in the account. Of these none will be of greater interest than the report of the Committee on Education of the Commonwealth Club of California presented at the regular club meeting of October 14, 1914. It may prove worth while to examine some of the important findings of the report, contrast them with the present status of vocational education in California, and perchance attempt to point the direction in which we seem to be moving.

The committee on education, as is true of all committees of the Commonwealth Club, was excellently chosen. It "included among its membership manufacturers, engineers, workmen, professional men, merchants, and educators, as it was recognized that the problem concerned the men who were to use the products of vocational education even more than it concerned the school men." Under the chairmanship of A. B. Anderson, now president of the San Francisco Teachers College, the committee evidently labored long and diligently. That it deliberated wisely and with considerable vision this article will attempt to show in the paragraphs which are to follow.

It should be remembered that the impetus for vocational education was just getting well under way in 1914. A few states, notably Massachusetts, New York, Pennsylvania, Indiana, and Wisconsin, were already embarked on programs which established for them a leadership which has never been lost. Congress had just appointed a Commission on Federal Aid for Vocational Education, the

report of which was to be three years later enacted with minor changes into the Smith-Hughes Law. California had appointed only a few months before a Commissioner of Vocational Education, the late Dr. E. R. Snyder, who, it may truly be said, burned out his life in the cause.

The legislature had just passed an "industrial education" bill which the Governor had vetoed. Vocational education was a timely subject for any forward-looking group of citizens to discuss.

The committee defined vocational education as "the training that will fit a boy or girl to become a producer in any industry for which he has been vocationally trained, and will give the ability to earn a living at the practice of the industry," and they followed with the statement that, "this is the crux of the whole business." Present day writers would modify the statement only in wording; such terms as industry, occupations, vocationally trained, have a more explicit connotation now than in 1914. But the spirit of the definition accords with our current conception of the aim and purpose of vocational education. We stand or fall on our achievement. If boys or girls are not better prepared to meet the problems involved in gaining a livelihood in the specific occupation for which we are presumed to have trained them the training has no place in the public school program.

The California plan for vocational education has consistently attempted to realize this aim and future years give promise of even clearer realization. We need to be reminded continually, however, of the explicitness of our aim. It is easy to drift into pseudo vocational education.



DR. EDWIN R. SNYDER,

State Commissioner of Vocational Education in California for nearly ten years, from January, 1914, to July, 1923, and then President of San Jose State Teachers College until his death in January, 1925.

After stating the definition the report proceeded to enunciate the committee's "most important finding, which is, that it is impossible to graft on to our present school system any scheme of vocational education which will conform to the definition just given." Three reasons were given: (1) that the public schools were "too academic in teaching such subjects as arithmetic, language, geography, and science," and accordingly could not be expected to succeed with anything so practical; (2) that though the schools might conceivably add complete industrial equipment to their plants they could never approximate the competitive commercial conditions of the world outside; (3) that the complexity of modern industrial life makes it impossible to take account of the needs of all. The committee receded slightly from this vulnerable position later in its report by stating that "where commercial conditions can be reproduced with little expense to the state, and where an economic demand for the product exists, such courses should make a legitimate part of our school system." Such examples as stenography, drawing, painting, and music were given. As a solution to what it considered in general an impossible problem the committee recommended that the school be taken into the shops and the industries.

The committee was right in its philosophy, but wrong in its interpretation of that philosophy, as it related to the public school problem. What has occurred is that the school has been taken into the shops but has at the in the years that have passed since the report of the committee of the Commonwealth Club. In it resides the public school system with his appointment and payment of his salary a function of the board of education. The boys or girls enrolled are students first and workers second. The scheme, cooperative vocational education, is the most significant development in vocational education in the years that have passed since the report of the committee of the Commonwealth Club. In it resides the greatest promise for complete and effective training for occupational proficiency. There is no community so small that it cannot carry on a considerable program of vocational education if it will take advantage of the possibilities for cooperative effort which exists in the occupational life of the town. The work now being done in Manteca and Fort Bragg exemplifies the type of service open to any public school system possessed of vision and the will to do. Similarly there is no vocational program in the state so excellent that it cannot be improved by an extension of its cooperative-training activities. Los Angeles, Fresno, Oakland, Sacramento, all are cities in which the scope of vocational education is being continually widened by the cooperation of school and industry. And in both types of community the aim set by the committee is being realized with satisfaction to the student, the school, and the employer.

Certain occupations, such as printing and automobile repair, have been found to lend themselves extraordinarily well to training under school conditions, particularly in the more rudimentary phases of the trades. The Frank Wiggins Trade School in Los Angeles is turning out men and women equipped to take their place in industrial life in a wide variety of occupations. We may confidently expect the counterpart of such a school in Oakland and in San Francisco before many years have passed.

In other aspects the report of the Commonwealth Club pointed the road along which we are now travelling. It foresaw the important place part-time education was destined to occupy. It could not foresee that within the part-time school would be developed a type of attack and an insistence upon individual needs which already is commencing to affect educational procedure in general. It could not foresee that individuals forced by law to attend part-time school until eighteen years of age would willingly continue attendance after the compulsory period was past because the school was helping them solve their individual problems of work and play, of health and marriage so effectively.

The committee likewise visioned the necessity for an adequate study of community needs as a basis for determining a vocational program, a necessity which we were prone to overlook in the early days but to which we are now giving increasing attention.

Prevocational education and vocational guidance were also treated in this report, although cautiously, for it was too early to say just what could be done. The dozen years since the report have seen a wide development of the junior high school in which the main consideration has increasingly come to be orientation. The same period has witnessed more and more attention to guidance as a pressing responsibility of public schools, and a consequent demand for specialized training for guidance work has made itself felt.

That the Committee on Education of the Commonwealth Club was in 1914 able to visualize so clearly the direction in which vocational education should develop in this state indicates how careful the deliberations must have been. That the program which has evolved in the intervening twelve years has deviated so little from the recommendations laid down by the Committee speaks well for those who have carried out the program. Where deviations have occurred the leaders in vocational education may feel gratified in realizing that their efforts have led towards greater effectiveness than the committee believed possible. It would be well if the Committee might soon devote another period of study to the progress which has been made since its report. Its investigations would be highly illuminating to all who were privileged to participate, and the results of its reflections and discussions would be of great help in pushing forward the work for another decade.

Schools and Social Workers Cooperate

Instances are multiplying in which the schools and the social workers are definitely cooperating to work together for the good of the boys and girls of the community.

A committee of the members of the Alameda County Social Agencies has arranged a list of all the social agencies on the one hand and all the school counselors on the other, so that each may reach the other quickly when their coordinated efforts are needed in handling a case.

In a recent meeting of the Berkeley Community Chest a program was presented on the coordination of school and social agencies and at the annual meeting of the California Conference of Social Work, Commissioner Ricciardi presented the part-time school as an agency for preventing juvenile delinquency.

A Ten-Year Span in Vocational Education

By NICHOLAS RICCIARDI,
State Commissioner of Vocational Education.

Vocational education of less-than-college grade is distinctly a secondary-education program. The next step in the development of that program must be thought out in terms of the objectives of secondary education, the place of vocational education in a secondary-education program, and the accomplishments to date in California.

Progress in Vocational Education from 1917 to 1927

When California accepted the provision of the Smith-Hughes Act in 1917 there was no state program of vocational education on which to build; in fact, there was no organized vocational-education program in any secondary school in the state. There were manual-training classes in the polytechnic schools; but full-day vocational classes in shop work, agricultural projects, or homemaking were unknown.

In 1917 there not only was no state plan for vocational education, but there was no State Department of Vocational Education; no Division of Vocational Education at the University of California; no plan for training craftsmen to teach vocational classes; no special, day, vocational classes for adults; no cooperative apprentice training; no craft advisory committees cooperating with the public schools; no part-time education for minors; no organized procedure for vocational counseling in secondary schools; no state or local supervisors for the various fields in vocational education; and no placement service in cooperation with community agencies and the U. S. Junior Placement Service.

After ten years of work on the part of vocational leaders in the state, we have a state plan of vocational education based upon the results of experience. We have a state supervisor for each of the three fields in vocational education for which federal grants are given: agricultural, industrial, and home-economics. Recently the State Board of Education unanimously passed a motion to the effect that in the next budget provision will be made for a state supervisor of commercial education. We have also local supervisors of vocational education working in cooperation with the State Department of Vocational Education. We have a teacher-training program established through a cooperative arrangement between the Division of Vocational Education of the University of California, and the State Department of Vocational Education, with classes held in both Berkeley and Los Angeles for the training of teachers for agriculture, trades, and part-time-education classes.

We have three state teachers' colleges which are, by similar arrangement, giving special teacher-training courses to experienced homemakers who are planning to become home-economics teachers. We have a state program of vocational education which includes, in addition to full-time trade, agriculture, and homemaking classes in high schools, special, day, vocational classes for adults. We have made great strides in the establishment of cooperative classes for apprentice training through the combined efforts of schools and industrial plants. These

classes receive the hearty endorsement of labor and industrial organizations. We have craft advisory committees that cooperate with the public schools in developing suitable training programs for the various vocations. In Los Angeles is one of the finest trade schools in the country, which is known as the Frank Wiggins Trade School.

We have over 20,000 young workers attending part-time-education classes designed to "enhance the vocational efficiency and the civic intelligence" of the pupils enrolled. In the larger cities of the state, we have counseling and placement programs backed by community agencies and cooperating with the U. S. Junior Employment Service.

We have federal- and state-aided vocational work in our secondary schools, in forty-eight counties. In every instance the vocational program is under the jurisdiction of the high school. Vocational education of secondary grade in California is now state-wide in scope. From an initial enrollment of 1,566 in 1917-18, the total enrollment last year, 1926, was 45,761. In 1917-18 the reimbursement for vocational classes conducted under the California plan of vocational education amounted to \$22,298.67. Last year, 1926, the total reimbursement was \$370,561.46.

A summary of progress in federal- and state-aided vocational education, during the period from 1917-18 to 1925-26, based on the sound foundation laid by the first commissioner, Dr. Edwin R. Snyder, is shown in the following table:

DATE	1917	1926
STATE PLAN	Initiated	Statewide plan providing for federal- and state-aided vocational classes in agriculture, trades and industries, and home economics.
TEACHER TRAINING	None (Initiated in 1918)	Special classes for the training of vocational teachers in trades and industries and agriculture at Berkeley and Los Angeles, given by Division of Vocational Education, University of California. Special classes in two teachers' colleges for the training of experienced homemakers as home-economics teachers and in the University of California at Los Angeles.
APPRENTICE TRAINING	None (Initiated in 1918)	Apprentice training given in cooperation with labor and industrial organizations.
PART-TIME COOPERATIVE TRAINING	None (Initiated in 1918)	Part-time cooperative training in cooperation with industrial plants.
SPECIAL DAY ADULT CLASSES	Initiated	Special day adult classes maintained in high schools and in special centers under the supervision of high schools.
PART-TIME EDUCATION FOR MINORS	None (Initiated in 1919)	Over 20,000 in part-time classes for minors.

DATE	1917	1926
STATE SUPERVISORS	Agriculture in 1918, trades and industries and home economics	State supervisor for each of the following fields: agriculture, trades and industries, home-economics. State Board recently passed resolution to provide for state supervisor of commercial education.
LOCAL SUPERVISORS AND HEADS OF DEPARTMENTS	None	Larger cities have city supervisors. Larger high schools have heads of vocational departments.
ORGANIZED VOCATIONAL COUNSELLING	None (Initiated in 1919)	Organized vocational counselling is a part of full-time program and part-time general-continuation instruction; 143 high schools have vocational counsellors devoting part time or full time to counselling. Student Vocational Counselling Card devised by State Department of Vocational Education for experiment is used in 16 selected high schools.
PLACEMENT SERVICE	None (Initiated in 1919)	Larger cities have placement service in co-operation with U. S. Junior Employment Service and part-time general-continuation instruction.
TRADE SCHOOL	None	Frank Wiggins Trade School in Los Angeles is one of the best trade schools in the country.
FOREMAN TRAINING	None	Special foreman conferences conducted under supervision of State Department of Vocational Education.
VOCATIONAL CLASSES IN HIGH SCHOOLS	A few	Federal- and state-aided vocational work in 48 counties. Enrollment increased from 1566 to 45,761. Reimbursement increased from \$22,298.67 to \$370,561.46.

The ultimate objective of a sound program of vocational education is to bring together the boy and the job. The effectiveness with which the boy develops into an efficient worker and an intelligent citizen determines, in the last analysis, the success of vocational education. In other words, the success of the youth as a worker and

citizen should be the real measure of the success of the program of vocational education.

The best possible program of vocational education produces persons who think straight, who work efficiently, and who discharge their duties intelligently as citizens. It produces, in other words, persons who are trained effectively for efficient service. One of the best definitions of efficient service is: "Work characterized by sanity and well-balanced conduct, by enthusiasm, righteousness, vision, insight, and cooperation."

To train individuals for efficient service, the five essentials are: (1) to counsel effectively; (2) to provide the most practicable training program possible for the vocation for which the individual is best suited; (3) to provide well-trained teachers to carry the training program successfully into effect; (4) to provide the character training that will insure sustained effort and necessary adjustments; and (5) to provide successful placement and follow-up in suitable employment.

The Outlook in Vocational Education

The accomplishments of the past ten years in vocational education are a spur to future progress. Some of the goals which we hope to reach in the state are: the development of more leaders in vocational education who may become city directors of vocational education, principals of trade and part-time schools, and coordinators for part-time cooperative classes; the encouragement of community surveys on which to base a program of vocational education; and the expansion of the opportunities for vocational training in the small communities through part-time cooperative classes or, in some cases, through regional vocational schools which will serve several adjoining districts.

Throughout the country the greatest expansion in the secondary-school curricula since 1900 has been in the field of vocational education. In our own state, the accomplishments of the first ten years of vocational training and the rapid development of our industrial life present a challenge for a far wider program in vocational training in the next ten years.

Supervision and Cooperation in Industrial Education

By J. C. BESWICK,

State Supervisor of Trade and Industrial Instruction.

Following the adoption of the Smith-Hughes Act in 1917, the State Department of Vocational Education devoted much time to the promotion and organization of trade and industrial courses as a part of the secondary-school program. A supervisor of trade and industrial education was appointed, and during the first year 42 approved, full-time trade classes were established in the high schools of the state. In the year 1918-19, 77 classes were maintained, with an enrollment of 1,778 pupils. This rapid development was the result, in part, of war conditions which stimulated young people to prepare for some type of service.

As trade and industrial education expanded geographically throughout the state, promotional activity increased at the expense of the close supervision that was possible from the state department during the early

development of the work. It became evident that adequate supervision must be provided locally if the quality of the work already established was to be improved or maintained, or if the training program was to be expanded to meet more of the community needs. It was evident also that the opportunity as well as the need existed to train workers by establishing courses on a cooperative, part-time and trade-extension basis. Such desirable expansion could come about only through the leadership of well-trained people to supervise and coordinate the work.

Improvement Through Supervision

The problem of adequate supervision in the field of trade and industrial education confronting the state calls for a specialized form of supervision differing from that in the field of general education. The determination of the

needs, the organization of the work, the content of the courses, and the setting up of standards for the evaluation of the work present problems entirely different from those in the field of general education. The standards applied to performance efficiency of those trained in trade courses are the standards of real life, not those of the school.

Two years ago the State Board of Education set up certain definite regulations for department heads and supervisors, requiring them to qualify for a supervisory or administrative credential.

The Federal Board for Vocational Education, with much practical insight and wisdom, took a most progressive step in allowing the use of teacher-training funds for part payment of the salaries of especially qualified local supervisors, with a view to improving the work in the local communities.

The qualifications of local supervisors are set up as follows:

- (1) Credentials.—A special secondary credential of the vocational-arts type, in some trade or industrial occupation and also a supervision credential. In some instances he must also hold an administration credential.
- (2) Teaching experience.—Not less than 3 years experience teaching approved trade or industrial classes organized under the federal and state vocational-education acts.
- (3) Professional education.—The equivalent of not less than 6 units in approved educational trade and industrial subjects other than the required courses demanded for the vocational-arts type or supervision credential, as follows:
 - (a) Supervision and administration of trade and industrial schools.
 - (b) Making and using job analyses for training trade teachers, and organizing the content for trade courses.
 - (c) Methods of training trade teachers.
- (4) General education.—The general education must be satisfactory to the appointing powers.

To meet his problems satisfactorily, the supervisor should possess, first of all, a sound philosophy of vocational education, a high teaching ability, proper educational and occupational experiences, desirable social and personal characteristics, good health, and the right kind of leadership. Thus equipped, he should realize the joy of rendering a genuine social service to the community.

Duties of the Local Supervisors

The duties of the local supervisors are: namely, (1) inspectional; (2) instructional, with each duty having, as its direct objective, the helping of teachers in service; and (4) promotional, which deals with the establishing of new work based on community needs. The latter duty implies that the supervisor must do much educational work not only with labor organizations, employers, committees, and teaching groups, but also with the public in general.

The cities now employing local supervisors under the provisions of the agreement are: Fresno, Los Angeles, Oakland, and San Jose.

Supply and Demand

To date the state department, through the Division of Vocational Education of the University of California, has been training teachers who have gone into trade and industrial work in both large and small high schools of the

state. From this group of especially trained teachers certain persons, with outstanding qualifications, may be recruited to take a special supervisory course and accept positions as local supervisors and coordinators in trade and industrial education. Individuals so trained are able to determine local needs and, under the proper conditions, to set up cooperative, part-time, and trade-extension work on a satisfactory basis.

Expanding the Vocational Program in Smaller Communities

A wonderful opportunity exists to expand the trade and industrial work on a cooperative, part-time and trade-extension basis in small communities. If there are ten or more pay-roll jobs in which boys and girls could be employed part time, and spend part time in school; or if there are employed mechanics who could be upgraded in their work through evening-school courses this instruction can be made profitable. Such a program can be successfully organized and operated at minimum cost if there is available someone who is qualified to supervise and coordinate the work of the school and the training in the occupations.

Industrial centers which have already set up cooperative, part-time courses under able leadership are: Huntington Park, Los Angeles, Oakland, and Stockton. Full-time local supervisors are in charge of these programs. Other communities that are carrying on cooperative, part-time courses under the supervision of the high-school principal, superintendent of schools, or head of the mechanical arts department are: Eureka, Fort Bragg, Manteca, and Sacramento. Cooperative part-time education meets a fundamental need of society in the most practical way, and on a thoroughly sound economic basis.

It is hoped that every school superintendent and high-school principal within the next two years will avail himself of the opportunity to expand the trade and industrial education programs along these lines. It is hoped, also, that vocational teachers who are already in service will be interested in preparing for supervisory positions that they may be ready when the demand for such service comes from superintendents and principals.

Program Aided Through Reimbursement

The State Department of Vocational Education will reimburse from federal and state funds local high-school districts setting up cooperative, part-time, and trade-extension courses under the federal and state acts up to one half the cost for instruction, and one half the cost for actual time spent in coordination.

Under the revised California state plan for vocational education for the next five years, it also will be possible for local high-school districts to organize evening-school classes meeting certain standards, and to receive federal and state aid for salaries of instructors. This method will offer opportunity to expand considerably the evening-school program of service in trade and industrial education, particularly in communities that employ local supervisors.

Application to establish all federal- and state-aided vocational courses must be made to the State Department of Vocational Education, whose representatives will aid in every way possible the establishing of the program, by personally meeting, if requested, with boards of education, school officials, and students.

Vocational Home Economics in the Last Decade

By MAUDE I. MURCHIE,
State Supervisor of Teacher-Training Courses in Home Economics.

The development of a broad, balanced program of instruction in home economics was the first step taken by the members of the State Department of Vocational Education in promoting a better class of home-economics instruction in the public schools. They believed it was important that eventually homemaking education should receive recognition as a basic part of every girl's education; that the necessity for developing the highest type of American home could not be over-emphasized; and that, since homemaking is an occupation which requires a broad culture, a high grade of education, and an unusual skill in many crafts, special education and training for the service is necessary.

An intensive course, which absorbs the entire interest, thought, and time of the pupil for a short period, was thought to offer the best opportunity for working out a balanced program of education for homemaking. As a consequence, the first year after the establishment of a state plan of vocational education one such class was established with 16 girls enrolled. The next year there were four classes with 61 girls enrolled. The rapid increase in the number of classes and in the enrollments after these two preliminary years is shown in Table I.

TABLE I

THE NUMBER OF ALL-DAY VOCATIONAL HOMEMAKING CLASSES AND THE NUMBER OF PUPILS ENROLLED FOR EACH SCHOOL YEAR DURING THE DECADE FROM 1917 TO 1927

School year	Number of all-day vocational classes	Number of pupils enrolled
1917-18	1	16
1918-19	4	61
1919-20	11	228
1920-21	14	316
1921-22	16	334
1922-23	17	350
1923-24	24	493
1924-25	27	651
1925-26	33	689

The California plan for vocational education in home economics makes provision for girls over 14 years of age for an all-day program of education representing an intensive course in homemaking of at least one-half day devoted to instruction in the practical duties of the home, and one-half day devoted to related and general subjects. This course is organized for a period of not less than one year, and not more than two years in length, for the reason that girls in such groups who do not marry at the conclusion of this course, and who do not pursue further the usual type of education preparatory for higher institutions, would probably find it more profitable to secure some training in a wage-earning occupation.

Although these classes have been few in number on account of the limited funds for promotion, yet the influence of their organization has distinctly modified the conception of an acceptable homemaking program on the part of school administrators and teachers. The effect has been to broaden the scope of content and to establish

more firmly the recognition of the subject in the public school program.

Part-time, Home-Economics Classes for Adults

The legislature of 1917 made modifications of the political code in order to enable the state to operate freely under the federal and state vocational education acts. Among these amendments was one enabling high schools to organize and maintain special day and evening classes under their jurisdiction for the purpose of giving instruction in any of the branches of study that may be taught in the high school. Prior to the passage of this act it was impossible for a high school to maintain evening classes without establishing and maintaining a complete evening high school. Up to this time apparently no one had realized that the most suitable time for maintaining such homemaking instruction for housekeepers was during the day rather than at night. Evening high schools had offered women an opportunity to improve their efficiency, but it was not until provision was made for this type of instruction under the provisions of the federal and state acts that the present large development in adult education in homemaking began.

Even during the first year there was a very satisfactory response to the opportunity offered, with 576 women enrolled. Now there are over thirteen thousand women enrolled in home-economics classes in California. The increase in enrollments in these classes is shown in Table II.

TABLE II

THE NUMBER OF ADULT WOMEN ENROLLED IN SPECIAL DAY CLASSES IN VOCATIONAL HOMEMAKING DURING THE DECADE FROM 1917 TO 1927

School year	Number of women enrolled in classes
1917-18	576
1918-19	2,243
1919-20	6,013
1920-21	6,446
1921-22	8,671
1922-23	9,519
1923-24	10,344
1924-25	12,222
1925-26	13,731

It was to encourage the development of special classes in the daytime for homemakers that the expenditure of vocational funds was limited in California to classes in which the major part of the class time falls between 6 A.M. and 6 P.M. This is the time of day most convenient for the housewife to attend. The women who attend these classes are decidedly a vocational group, because, in a majority of cases, they are having experience in the arts of the home.

The women engaged in business are obliged to attend classes in the evening. In large cities where these women are enrolled, the fact that they are in employment should, of course, be taken into consideration in the organization of homemaking instruction for the group. Emphasis should

be placed upon adjustment of their personal and home-making activities to their business lives. The problems of management and wise consumption should be stressed. Many of these young women in employment are inexperienced in homemaking. This factor must also be taken into consideration in planning a course.

Funds for Homemaking

Only twenty per cent of the entire trade and industrial fund is available for expenditure in homemaking education in the public schools. This limitation was set by the federal act. The following table shows the funds available from year to year for expenditure for home-economics education, the claims presented by the public schools, and the allowance on account of pro-rating to come within the twenty per cent limitation. Each year since the inception of the program there has been an increase of funds under the provisions of the federal act. The maximum, however, was reached in 1925-26, so that for this school year, 1926-27, and thereafter, the allowance will remain constant unless increased by further legislation.

TABLE III

AMOUNT OF STATE AND FEDERAL AID AVAILABLE FOR HOME-MAKING EDUCATION IN CALIFORNIA HIGH SCHOOLS, THE CLAIMS PRESENTED FOR REIMBURSEMENT BY SCHOOLS, THE ALLOWANCE WITHIN THE TWENTY PER CENT LIMITATION, AND THE PRO-RATING FIGURE, CLASSIFIED ACCORDING TO SCHOOL YEAR.

School year	Amount available for aiding schools	Amount of claims presented by schools	Amount of reimbursement	Pro-rating figure
1917-18	\$6,950.38	\$3,866.10	\$3,866.10	-----
1918-19	10,425.56	7,301.85	7,301.85	-----
1919-20	13,900.77	18,263.60	13,900.76	.76
1920-21	17,375.96	22,269.38	17,375.96	.78
1921-22	25,970.82	27,500.68	25,970.82	.94+
1922-23	30,299.30	31,013.56	30,299.30	.98—
1923-24	34,627.78	40,058.72	34,627.78	.86+
1924-25	43,284.72	47,687.04	43,284.72	.91—
1925-26	51,941.66	55,388.16	51,941.66	.94—

A study of Table III will show the consistent growth of the program. Not only was the increase in available funds from year to year absorbed, but each year the claims for reimbursement exceeded the increased allowance available by a margin which did not vary greatly from year to year.

When the vocational-education acts went into effect, a survey of the situation revealed the fact that California was well provided with institutions training teachers for home-economics instruction. Also, many trained teachers of home economics were being recruited from eastern institutions. The courses given by the California institutions were, upon the whole, on a par with those given in the east, but the subject of instruction was comparatively new and in the process of making.

In the beginning, home-economics instruction was confined to cooking and sewing, and though it had in some measure expanded, a comparison of the content of the course, with the demands made upon the housewife clearly indicated that it was entirely too narrow in scope to meet the needs of the situation. One of the main ends, then, in the promotion of the subject was to broaden its scope,

but before any great progress could be made in this direction, it was necessary to provide for supplementing the training of many of the teachers in service. For this reason, the State Board of Education provided for a supervisor of teacher-training in home economics who should divide her time between the instruction of teachers in service, and the supervision of teacher-training in the various institutions of the state.

The survey mentioned above also revealed the fact that most of the persons in training for teaching service in home economics were young women whose main occupations throughout their lives had been the attending of school. Consequently, they could not bring to their profession the breadth of experience in their chosen fields, which is desirable on the part of a teacher.

It was felt that the introduction into the profession of women who had had both extended home experience and special training would greatly strengthen the corps of teachers in the field. The remainder of the fund available in this department for the training of home-economics teachers has, therefore, been used in encouraging the teacher-training institutions to find and enroll in special home-economics courses women who have had both schooling and extended experience as homemakers.

Teacher-training institutions are well distributed in California, being located in centers designed to serve the state locally from the far north, the extreme south, the interior valleys, and the coastal areas. From the beginning almost all of these institutions have maintained courses in home economics designed to prepare teachers for high schools. As a result a much larger percentage of teachers have been given the opportunity to secure this special training than could have been possible otherwise. A survey showed that the enrollment in institutions is largely recruited from the area surrounding a given institution.

Experienced homemakers who are to be trained as teachers of homemaking subjects are carefully selected by the teacher-training institutions cooperating with the State Board of Education. The opportunity for such training is confined to persons who are between the ages of 22 and 45, who have had at least four years of home-making experience after their eighteenth year, who are graduates of a four-year high school, and who are otherwise qualified to carry upper-division college work. Two years of advance credit is given such applicants, on account of the tested home-making experience, thus reducing the usual four-year requirement for the preparation of a home-economics teacher to two years. This two-year course, insofar as possible is adjusted to the previous training and experience of the applicant. Upon completion of the course the experienced homemakers are given the same teaching privileges as are granted to those who are trained in accordance with the regular four-year course as teachers for high schools in this special field.

Very early in the program the plan proved practicable and highly desirable both for teacher-training institutions and for the public-school needs. Four years ago an expansion of this program was provided by changes set up in the state plan for vocational education to accelerate the development in certain teacher-training institutions of programs which could meet the vocational demands in

homemaking in the public-school system, both for adult, part-time, and all-day-school instruction.

The conception of the philosophy of vocational education and its application to school organizations, the provisions for training for adult and part-time programs, the newer tendencies in homemaking education, placing emphasis on child care and training, family relationships, and home art were among the problems inherent in a vocational program, but which were given but little attention in teacher-training institutions up to this time.

Therefore, the state plan was modified to develop in three institutions cooperating with the State Board programs to meet these needs.

The expansion called for the extension of practice-teaching facilities to include provision for adult and part-time practice groups, for a nursery-school group, for new courses in education dealing with the philosophy of adult

and part-time education, and for a re-focusing of homemaking content in all courses having any bearing on the problem. There was included also provision for summer-session programs to promote these projects and to extend the opportunity to teachers in the field to improve or modernize their training. These projects are carried on in cooperation with the recruiting and training of the groups of experienced homemakers.

The institutions cooperating with the State Board of Education are the State Teachers Colleges at Chico and San Jose, and the University of California at Los Angeles. The projects in each institution are in different stages of development, due to local conditions; but in each instance growth is both progressive and basic, and in every sense the project is regarded as an institutional problem in which the home-economics department and the entire institution mutually contribute and benefit.

Vocational Agriculture Makes Big Growth

By JULIAN A. MCPHEE,
State Supervisor Vocational Agriculture.

Agricultural education was first introduced in the school system of California in 1909, when modified forms of botany and zoology were taught in three of the schools. From this course of so-called agriculture education, a marked development has taken place, both in the kind of courses offered and in the number of schools offering them. In 1915 sixty schools of the state reported agricultural courses, but an investigation showed that approximately one half of them consisted of one elementary course in agricultural chemistry or agricultural botany. Only thirty-three of the schools offered anything like practical courses in agriculture. Of these, thirty required work in the school and three required the pupils to do project work at home. The amount of practical work required varied greatly in different schools; some schools confined the experimental work to plots in the school yard; other schools conducted actual farm work at the school or at home. The amount of practical work required in certain schools depended upon the previous experience of the individual pupil. The predominating tendency, however, was to neglect the practical aspect of agriculture courses in an attempt to cover a wider theoretical field.

In 1917 provisions of the Smith-Hughes Act were accepted by California, and a state supervisor of agricultural education was added to the staff of the State Board of Education. The chief function of this officer was to establish, throughout the state of California, vocational-agriculture courses in which the emphasis should be placed upon the science of farming rather than upon the pure science of high-school instruction.

The biennial report of 1918 points out that in the first period of vocational-agriculture education in the state, the larger rural high schools, and such high schools in the cities as had large attendance of rural pupils, were chosen to promote courses in farming. To secure the largest possible geographical area, and to insure the development of courses of study covering all phases of agriculture, the schools selected were chosen from widely distributed sections of the state.

It was planned, at that time, that with the building up of type courses in vocational agriculture, further promotion would be in the aiding of smaller rural high schools to maintain the work. So great was the influence of vocational-agriculture work that certain of the high schools handling the type of instruction would probably have continued it even though special reimbursement were withdrawn. Since that time this new type of agricultural instruction has expanded rapidly.

The 1920 biennial report¹ states that at that time one school maintained a four-year course; one school a three-year course; and five schools maintained two-year courses. The development of vocational agriculture was somewhat hindered at first by teacher shortage, because of the period of war service, but by 1920 summer-school courses, maintained by the State Board of Education in cooperation with the University of California at University Farm, Davis, helped to relieve the situation. By 1922, it was reported² that 25 schools maintained a one-year course; 20 maintained a two-year course; 4 maintained a three-year course; and 1 a four-year course. The prevalent policy was to lengthen the course as soon as the number of pupils desiring the work was sufficient to warrant it. By this time a more highly trained group of teachers was meeting the demands of vocational-agriculture instruction. There were teachers who could assume leadership in the rural communities and convince teachers, parents, and pupils that the full course in agriculture provided ample opportunity to secure a sound, liberal education of secondary grade.

By 1924, the meaning of vocational agriculture had taken on a broader aspect, including in its curriculum certain social and psychological phases, according to the biennial report³ of that year. The objectives are stated as follows: "To create an attitude of appreciation for

¹ California State Board of Education. *Report of the Commissioner of Industrial and Vocational Education*. June, 1920, p. 19.

² California State Board of Education. *Report of the Commissioner of Industrial and Vocational Education*. June, 1922, p. 19.

³ California State Board of Education. *Report of the Commissioner of Industrial and Vocational Education*. June, 1924, p. 29, 30.

agriculture in relation to the other vocations as an occupation, a business, and a mode of life; to comprehend and to acquire skill in the practice, the science, and the business of farming in order that men may be trained as farmers, rural leaders, managers of cooperative enterprises, and for the many other branches of human endeavor that closely affect farm life and rural progress; to provide a means for the development and expression of social instincts; . . . to promote rural health and sanitation; to stimulate a proper moral attitude to cope with rural and village life; to educate for worthy rural home membership; to provide for vocational guidance within the field of secondary vocational agriculture . . ."

The following table shows the steady growth that has taken place in vocational agriculture during the last ten years:

NUMBER OF SCHOOLS, CLASSES, AND PUPILS ENROLLED
IN VOCATIONAL AGRICULTURE IN CALIFORNIA,
CLASSIFIED ACCORDING TO SCHOOL YEAR

School year	Number of schools	Number of classes	Number of pupils
1917-18	10	13	172
1918-19	22	26	337
1919-20	32	40	640
1920-21	39	64	1097
1921-22	50	81	1281
1922-23	57	124	1475
1923-24	63	147	1838
1924-25	68	172	2163
1925-26	77	201	2537
1926-27	88	227*	3000*

* Estimated.

The enrollment in vocational-agriculture classes in the high schools of California has increased over sixteen hundred per cent since the work began in 1917. This means that in communities where farming is the principal occupation the need for vocational training is being felt more and more. Each year, since the passage of the Smith-Hughes Act, there has been an average of nine new high schools in the state that felt the need of such education, and were added to the list of schools already giving the agriculture work.

The results of the work in the past two years, as given in the 1926 biennial report,⁴ indicate the present status of the vocational work in agriculture as follows:

The general up-building of departments so that for the most part the intent and purposes of the Smith-Hughes program for vocational agriculture is being carried out in all the schools in the state that receive reimbursement. A system of scoring agricultural departments on their efficiency and accomplishments has been inaugurated, and all schools for the past two years have shown a marked improvement.

The programs for the various high-school agricultural departments have been greatly enlarged, and not only are more students receiving the benefits under the instruction in agriculture, but many evening courses are being held for adult farmers, and much more service is rendered to the community as a whole from the agricultural standpoint. The projects being carried on by each student taking the vocational-agricultural work have improved

90 per cent as based upon the amount of net returns and the number of completions for the state as a whole.

There are over 6,000,000 farms in this country producing over \$14,000,000,000 worth of agricultural products. There are over 300,000 new farmers taking up the management of a farm for the first time each year. Most of these new farmers are the sons of farmers who have had experience on their fathers' farms, but who have not had organized instruction that would fit them to operate farms in keeping with the changes in agricultural conditions.

The system of agricultural instruction which is growing so rapidly in our high schools was inaugurated to meet the needs of the coming farmers. The introduction of new and improved methods of farming, the increased use of machinery, together with the larger scope of farm business as it relates particularly to problems of marketing and distribution, all point to the necessity of the coming, as well as the present, generation being especially equipped to enable them to conduct successfully this complex and ever-growing business.

Rural Communities Have Part-time Classes

By I. S. NOALL,

State Supervisor of Industrial Education

"Utah is inaugurating a system of child accounting and part-time education that will show the whereabouts of all children between six and eighteen years of age throughout the entire year, and provide part-time education for all employed youths and full-time dull-season schooling for those temporarily out of work. The difficult problems of adaptation to the rural communities where the heavy labor load is in the spring and autumn is being accomplished by a combination of the following responsibilities in the person of the part-time teacher:

1. Census checking, permit issuing, and child accounting in August, September, and October.
2. Teaching part-time dull-season classes from November until spring work opens in March or April.
3. Visiting teacher work for the prevention of school failures and unnecessary drop-outs, and the correction of miscellaneous problems contributing to maladjustments in school through April and May.

The work which is being conducted as an experimental study promises a number of interesting developments." (American Vocational Association *News Bulletin*, August, 1926.)

Fall Conference on Part-time Education

Increasing the number of hours of instruction for unemployed boys and girls in the part-time schools of the state is a problem of such wide-spread interest that Superintendent Cooper and Commissioner Ricciardi are planning to call a conference during September to discuss ways and means. Those who attend the conference will be asked to face squarely the weaknesses of part-time education as it now exists, to evaluate its strength, and to make plans for new lines of accomplishment. How to secure increased attendance and how to make the instruction sufficiently worth while will be the topics of chief interest.

⁴ California State Board of Education. *Report of the Commissioner of Industrial and Vocational Education*. June, 1926, p. 56.

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Trade and Industrial Education Agriculture Education

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TO OUR FIRST COMMISSIONER OF VOCATIONAL EDUCATION

This number of the VOCATIONAL EDUCATION NEWS NOTES is issued in recognition of the ten years of vocational education in California since the acceptance by the state of the provisions of the Federal Smith-Hughes Act. Dr. E. R. Snyder was then state commissioner of vocational education and the early success of the vocational work in the secondary schools of the state is due largely to his vision and leadership. It is fitting that this number should be dedicated to his memory.

SPONSOR OF NATIONAL VOCATIONAL EDUCATION ACT

The Honorable Dudley M. Hughes, with Senator Hoke Smith, also of Georgia, sponsored the bill which was passed by Congress in February, 1917, and is known as the Smith-Hughes Act or the National Vocational Education Act. Mr. Hughes, at the age of 79, died in January of this year, having lived to see nine years of progress in the field of education which he had so earnestly promoted. As one of the nine original members of the Commission on National Aid to Vocational Education created by Congress in 1914, as chairman of the committee on education in the House of Representatives in 1917, and as a member of the first state board for vocational education in Georgia, Mr. Hughes was one of the pioneer friends of vocational education. He lived to know that more than 875,000 people in the United States, young and old, had been enrolled in the last year in the various types of classes provided by the act which he had sponsored.

OUR NEW STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

William John Cooper, recently appointed state superintendent of public instruction, has clearly demonstrated that he thoroughly appreciates the need for an effective vocational-education program as a vital part of secondary education. As city superintendent of schools of Fresno, he recommended to his board of education that a com-



WILLIAM JOHN COOPER,
State Superintendent of Public Instruction

munity vocational survey be authorized. The result of that recommendation is the publication, by the Division of Vocational Education of the University of California and of the State Board of Education, of "A Study of Vocational Conditions in the City of Fresno."

Recently Mr. Cooper stated: "During the next two years secondary education in this state will be subjected to critical investigation. One guess which your superintendent would hazard at this time is that any thorough-going investigation will indicate a need of more stopping places along the secondary-school path, and the development of curricula which will provide that pupils forced to stop at these various terminals may have adequate training for the vocations such pupils may desire to enter."

California is fortunate indeed to have as state superintendent of public instruction a leader who has such a philosophy of secondary education and who gives to vocational education of less-than-college grade a vital place in secondary education.—N. Ricciardi.

SUMMER-SESSION PROGRAM IN VOCATIONAL EDUCATION

The summer-session programs in vocational education in both Berkeley and Los Angeles will emphasize the field of vocational guidance. Two visiting instructors will come from the east to teach these courses. In Berkeley Dr. Edward Rynearson, who is director of vocational guidance for the Pittsburgh public schools, and in Los Angeles Dr. Alanson H. Edgerton, who is professor of industrial education, and chairman of courses in vocational guidance, vocational education, and industrial and applied arts at the University of Wisconsin, will offer the course in vocational guidance.

The staffs in Berkeley and Los Angeles, and the courses which are to be offered in each summer session, are as follows:

SUMMER-SESSION STAFF AT BERKELEY

- EDWIN A. LEE, Associate Professor of Education and Director of the Division of Vocational Education.
 MELVIN S. LEWIS, Lecturer in Education and Assistant to the Dean of the School of Education.
 BENJAMIN E. MALLARY, Supervisor of Classes for Training Teachers of Trade and Industrial Subjects, San Francisco Bay Region; Lecturer in Education.
 GEORGE C. MANN, Director of Vocational Education, Berkeley.
 JOHN E. CARPENTER, Principal of Sacramento Part-time High School.
 EDWARD RYNEARSON, Director of Vocational Guidance, Pittsburgh Public Schools.
 HENRY M. SKIDMORE, Lecturer in Education; Supervisor of Classes for Teachers in Agriculture.
 L. B. TRAVERS, Assistant Director of Vocational Education, Oakland.

COURSES IN BERKELEY

Vocational Education, Vocational Guidance, Part-time Education

- S160. Vocational Education. LEE
 A general course in vocational education. A descriptive survey of the history, scope, aims, and purposes of vocational education and certain outstanding current problems. 2 units.
 M Tu W Th F, 9.
 167s. Supervision of Vocational Education. LEWIS
 Function of the various phases of supervision in relation to the achievement of the objectives of the supervision of vocational education. Prerequisite: Education 160, or equivalent. 2 units.
 M Tu W Th F, 9.

S260A. Vocational Education: Seminar.

LEE

Admission on consultation with the instructor. 2 units.

Tu Th, 4-6.

S164. Vocational Guidance.

RYNEARSON

For vocational counselors in high schools, teachers, and principals of junior and senior high schools, and others interested in the problem of the guidance of youth. Origin, philosophy, and present practice in vocational guidance, and important problems now demanding solution. Admission to this course on consultation with instructor. 2 units.

M Tu W Th F, 11.

161vg. Problems in Vocational Guidance.

RYNEARSON

An advanced course designed for experienced guidance workers. Problems dealing with psychological tests, records and forms, courses in occupational information, case studies, etc. Admission only upon consultation with instructor. 2 units.

M Tu W Th F, 10.

S162. Part-time Education.

CARPENTER

Various factors contributing to school mortality and the necessity for part-time education, the type of organization and instruction suited to the needs of various groups found in the part-time schools, and the value of placement, guidance, and coordination activities. Organization and activities of part-time schools in this country and abroad, and their evaluation in the light of the California situation. Prerequisite: junior standing. 2 units.

M Tu W Th F, 2.

168P. Curriculum Construction for Part-time Schools.

CARPENTER

The bases for selection of material for instruction in citizenship and the vocational and other subjects taught in the part-time schools; the organization of such material into suitable units of instruction to meet various needs. This course is specified for the credential for the teaching of special classes organized under the Part-time Act. 2 units.

M Tu W Th F, 9.

169. Current Problems in Part-time Education.

MANN

For teachers and administrators who have had some experience in part-time education. The administration of the part-time school, coordination of instruction with employment and social background, treatment of psychological and behavioristic problems, etc. Admission to the course upon consent of the instructor. 2 units.

M Tu W Th F, 1.

Agriculture Teacher-training Courses

161A. Principles of Analysis and Curriculum Construction in Agriculture.

SKIDMORE

Development of technique in analysis of farm enterprises as a basis for curriculum construction in agriculture of secondary grade. 2 units.

M Tu W Th F, 10.

300. Problems of the Agriculture Teacher.

SKIDMORE

An advanced course for agriculture teachers in service. The teacher's annual program of work serves as the core of the course, the development of which provides opportunity for discussion of major problems. 2 units.

M Tu W Th F, 8.

Trade and Industrial Teacher-training Courses

361. Occupational Analysis and Curriculum Construction.

MALLARY

Analysis and classification of the trade knowledge and experience which the worker possesses, methods of teaching, and demonstration teaching. No credit.

M Tu W Th F, 8-10.

362. Technique of Vocational Instruction.

MALLARY

Outline of instructional and administrative problems involved in the actual teaching of a trade; related problems, and suggested solutions. No credit.

M Tu W Th F, 10.

364. Theory and Administration of Vocational Education.

TRAVERS

A brief study of the origin of the movement for vocational education in this country; the interpretation of federal and state legislation affecting vocational education; the problems involved in the organization of day, part-time, and evening classes; existing types of vocational courses; equipment, etc. No credit.

M Tu W Th F, 11.

365. Supplemental Subjects.

TRAVERS

Related material inherent in the trades presented, in terms of science, mathematics, and drawing; how to use this related material as a means to more effective teaching. No credit.

M Tu W Th F, 8-10.

366. Oral and Written Presentation of Vocational Material.

MANN

This course is designed to increase ability and facility in the use of the English language and will consist of practice in shop talks, preparation of reports, and addresses before public gatherings. No credit.

M Tu W Th F, 2.

367. Civic and Employment Relations.

LEWIS

Of value to applied-subjects teachers in creating a sound and fundamental attitude of mind toward citizenship and industrial relations on the part of potential workers. No credit.

M Tu W Th F, 10.

SUMMER-SESSION STAFF AT LOS ANGELES

HOWARD A. CAMPION, Principal of Frank Wiggins Trade School, Los Angeles.

ALANSON H. EDGERTON, Professor of Industrial Education and Chairman of Courses in Vocational Guidance, Vocational Education, Industrial and Applied Arts, University of Wisconsin.

BENJAMIN W. JOHNSON, Assistant Director, Division of Vocational Education; Supervisor of Classes for Training Teachers of Trade and Industrial Subjects; and Lecturer in Education, University of California at Los Angeles.

NICHOLAS RICCIARDI, State Commissioner of Vocational Education, California.

GEORGE S. SANDERS, Special Agent, Federal Board for Vocational Education.

LYNN E. STOCKWELL, Director of Vocational Education, Fresno.

COURSES IN LOS ANGELES**Vocational Education, Vocational Guidance,
Part-time Education**

S160. Vocational Education.

SANDERS

A general course in vocational education. A descriptive survey of the history, scope, aims, and purposes of vocational education and certain outstanding current problems. 2 units.

M Tu W Th F, 9.

167A. Organization and Administration of Vocational Education.

RICCIARDI and STAFF

A symposium course, given by the California State Commissioner of Vocational Education and his staff, dealing with the organization and objectives of vocational education in the secondary school. The course will deal with the California State Plan for Vocational Education as it relates to trade and industrial education, agricultural education, homemaking education, and vocational education for the disabled. It will be accepted in partial satisfaction of the requirements for the administrative and supervisory credential. 2 units.

M Tu W Th F, 12.

161IA. Industrial Arts.

EDGERTON

A course which will give a comprehensive view of the objectives of industrial arts education, particularly as they relate to junior and senior high schools; together with discussions concerning ways and means of realizing these objectives. 2 units.

M Tu W Th F, 10.

S164. Vocational Guidance.

EDGERTON

Designed to meet the needs of vocational counselors in high schools, teachers and principals of junior and senior high schools, and others interested in the problem of the guidance of youth. A fundamental course dealing with the origin, the philosophy, and present practice in vocational guidance, and the important problems now demanding solution. Consent of the instructor is required for registration in the course. 2 units.

M Tu W Th F, 9.

S162. Part-time Education.

CAMPION

A study of various factors leading to school mortality and the necessity for part-time education, the type of organization and instruction suited to the needs of various groups found in the part-time schools, and the value of placement, guidance, and coordination activities. A study of organization and activities of part-time schools in this country and abroad, and an evaluation of them in the light of the California situation. Prerequisite, when taken for credit: junior standing. 2 units.

M Tu W Th F, 11.

Trade and Industrial Teacher-training Courses

361. Occupational Analysis and Curriculum Construction.

JOHNSON

Analysis and classification of the trade knowledge and experience which the worker possesses, methods of teaching, and demonstration teaching. No credit.

M Tu W Th F, 8-10. Two sections.

362. Technique of Vocational Instruction.

JOHNSON

Outline of instructional and administrative problems involved in the actual teaching of a trade; related problems, and suggested solutions. No credit.

M Tu W Th F, 10. Two sections.

364. Theory and Administration of Vocational Education.

CAMPION

A brief study of the movement for vocational education in this country with emphasis on the interpretation of federal and state legislation; problems involved in the organization of day, part-time, and evening classes; existing types of vocational courses; equipment, etc. No credit.

M Tu W Th F, 1.

365. Supplemental Subjects.

STOCKWELL

Related material inherent in the trades presented in terms of science, mathematics, and drawing; how to use this related material as a means to more effective teaching. No credit.

M Tu W Th F, 10-12.

366. Oral and Written Presentation of Vocational Material.

SANDERS

This course is designed to increase ability and facility in the use of the English language and will consist of practice in shop talks, preparation of reports, and addresses before public gatherings. No credit.

M Tu W Th F, 8.

367. Civic and Employment Relations.

STOCKWELL

Of value to applied-subjects teachers in creating a sound and fundamental attitude of mind toward citizenship and industrial relations on the part of potential workers. No credit.

M Tu W Th F, 9.

Students who wish to secure teachers' credentials should consult in Berkeley with Mr. Mallary in regard to the requirements for the vocational arts credentials or with Mr. Carpenter in regard to the part-time-school credential; in Los Angeles with Mr. Johnson in regard to either of these credentials, or with Miss Ethel Richardson in regard to the part-time-school credential. As the usual list of courses in part-time education is not given in Los Angeles this year, it is especially important that the candidate consult with Mr. Johnson or Miss Richardson in regard to acceptable substitute courses.

History of Trade Teacher Training in California

By BENJAMIN W. JOHNSON,

Assistant Director, Division of Vocational Education, University of California at Los Angeles.

The development of any program of social work into an achievement requires, first of all, a man with a vision, coupled with wisdom, training, and experience in the field. The development of vocational teacher training in California is due to Dr. Edwin R. Snyder, the first commissioner of industrial and vocational education, who was appointed to that position by the State Board of Education in January, 1914. Its early progress is due, also, to the men whom Dr. Snyder selected to carry out the details of the program which he had conceived with such keen insight into the need, both present and future, for vocational training in this state. His untiring devotion to the cause of vocational education no doubt shortened his life. His death was a loss not only to the state, but also to the nation. He was a prophet and a leader in the promotion of a democratic form of education that has enabled the state to recognize the need for preparation and training for the wage-earning group, as well as for the professional group.

The beginning of organized training for the teachers of trade and industrial subjects dates from the winter of 1917-18, less than a year after the passage of the Smith-Hughes Act granting federal aid to the states for the promotion of vocational education.

Two centers for the training of trade and industrial teachers for California were established by the State Board of Education; one in the Bay region in Oakland, in cooperation with the University of California; and the other in Los Angeles, in cooperation with the Los Angeles State Normal School. When in 1919 the Los Angeles Normal School became the Southern Branch of the University of California, this center was placed on the same status as the Oakland center under the administration of the University of California.

Mr. Frank Ball, formerly president of the Santa Barbara Normal School, was appointed supervisor of teacher training in the south in February, 1918; and Mr. Charles L. Jacobs, formerly director of trade and industrial work for the San Francisco schools, was appointed to a similar position in the north. The establishment of teacher-training classes was fraught with a great difficulty, owing to the fact that war activities were making extreme demands on every available man. The first classes were largely recruited, especially in the north, from among the industrial-arts teachers who were interested in qualifying to become teachers of vocational subjects.

Mr. Ball and Mr. Jacobs also did promotional work, by speaking at meetings of labor unions and at gatherings of employers, by posting notices on the bulletin boards in factories and shops, and by preparing descriptive articles for the press. Because of the shortage of teachers the Commission of Credentials found it necessary to grant a special credential to men and women who had received no training whatever for teaching, but who met the other qualifications required by the act.

Through the wisdom of Dr. Snyder it was possible for the state to respond fully to the request of the Federal

Board for Vocational Education, in cooperation with the War Department, to provide opportunity for drafted men to prepare themselves in the essential occupations. This preparation was not only in mechanics and shipbuilding, but also in agriculture. A further demand was thus created to train men to teach the skilled trades. This responsibility was given to Mr. John C. Beswick, who was appointed special director of this war-service work in March, 1918. Mr. Beswick was formerly director of trade and industrial education at the Manual Arts High School of Los Angeles.

In the summer of 1918 Mr. Ball was taken seriously ill and passed away in August, with his work scarcely begun. He was succeeded by Mr. George W. Galbraith, who was in charge of the training of industrial teachers and the teaching of wood-working at the Los Angeles State Normal school. Mr. Galbraith found it necessary to raise the standards for the selection of the men, to organize the office, to establish records, and to bring order out of the situation. The problems of certificating men and women, and the academic prejudices that militated against vocational work combined to make the task a heavy one. It was also during the winter of 1918 that the epidemic of influenza closed the schools of the nation so that, for a considerable period of time, Mr. Galbraith interviewed possible candidates and carried on such work as he could from his own home. In spite of these disadvantages the work grew and he was able to train and place men and women, many of whom are now leaders in vocational work in the southern part of the state.

The university authorities soon realized that the adequate organization of the training of vocational teachers required some one on the faculty of the University of California especially qualified to organize this work for the state as a whole. President Wheeler was fortunate in securing the services of Dr. Robert J. Leonard, who, at the time, was acting as a regional agent for the Federal Board for Vocational Education, having been one of the five original agents selected from different parts of the country to carry out and develop an adequate program of vocational education in trades and industries. Upon Professor Leonard's recommendation there was created within the year the Division of Vocational Education as a part of the School of Education of the University of California. In this Division the entire work of the training of trade and industrial teachers has since been carried on in cooperation with the State Board of Education.

The heavy work that Mr. Galbraith had undertaken, and his devotion to it, undermined his health and forced him to withdraw from the work from time to time, and eventually to resign in the fall of 1921. During the spring of 1921, Mr. John E. Carpenter, who had been head of the industrial-arts work in Alameda, and who had secured his Master's degree under Dr. Leonard's direction (his thesis being a study of the training of trade and industrial teachers) took Mr. Galbraith's place temporarily. In the summer of 1921, Mr. Carpenter

accepted an appointment as educational director in the Kamehameha School in Honolulu, and Mr. John G. Miller, who had been a member of the teacher-training staff in the south, and head of vocational work at the Venice High School, was appointed supervisor of classes for the training of trade and industrial teachers at the Los Angeles center.

In the north, Mr. Charles L. Jacobs continued in charge of the work until August, 1921, when he resigned to accept an appointment at the Santa Barbara State Normal School. Mr. Benjamin W. Johnson, then federal agent for the Pacific Coast Region, was appointed supervisor in his place, and also lecturer in education in the School of Education at the University of California.

The first summer courses for the training of trade teachers was established in 1921. A good attendance was secured, not only of those who were already teaching and of those who desired to complete their training to qualify for the long-term credential, but also a surprisingly large number of candidates who were willing to give up their employment and their pay to attend the summer session. Among those who were assisting in the teacher-training at this time was Mr. Edwin A. Lee, professor of vocational education at the University of Indiana, who conducted courses in vocational education at Los Angeles. Increased demands upon Dr. Leonard's time due to his appointment as a university representative in educational relations resulted in the appointment of Mr. Lee as assistant director of the Division of Vocational Education at Berkeley in the fall of 1921.

A part of the plan made by Dr. Snyder and Dr. Leonard was to have the supervisors spend at least half of the year in the field in follow-up work in order to keep in close touch with the various trainees. As a part of initiating the plan in the north, Mr. Benjamin E. Mallary, who had been on the staff in charge of foremanship-training work in Cleveland, Ohio, was brought to California in the fall of 1922 to be associated with Mr. Johnson in the carrying out of this program. Foreman training was in 1923 being recognized as an important part of a vocational-training program and the training of foreman conference leaders a responsibility of the teacher-training department. Mr. Johnson had, in pursuance of this policy, during the first year of his work, conducted such training in Hotel Oakland. When Mr. Mallary came, further work in this field was undertaken. Training conferences were conducted at the Mazda Lamp works, the Paraffine Paint plant, the Emporium, and the Fairmont Hotel. Efforts were made to establish other groups in the industries, but lack of time and funds made further foremanship-training work impossible at that period.

A staff reorganization in 1923 resulted in Mr. Johnson's assuming full charge of the work in Los Angeles and in the promotion of Mr. Mallary to the supervisorship of teacher training at Berkeley. In June, 1924, Dr. Leonard resigned from the University of California to accept the directorship of the School of Education of Teachers College, Columbia University, and Mr. Lee, who had been acting director of the Division of Vocational Education during the absence of Professor Leonard the previous year, was appointed director. Mr. Johnson was shortly thereafter named assistant director of the Division

of Vocational Education in the south. There have since been no changes in responsibility.

A number of men have served as assistant instructors in both Berkeley and Los Angeles and their efforts have contributed measurably toward the success of the program. In Berkeley such men as Frederick Horridge and Willard W. Patty, now professor of vocational education at Ohio State University; and Melvin S. Lewis, assistant to the dean of the School of Education, University of California, and associate professor-elect at Indiana University, have divided their time between instructing in this capacity and pursuing study toward the Doctor's degree. The Los Angeles staff has included among others the names of Howard Campion, principal of the Frank Wiggins Trade School at Los Angeles, and Lynn E. Stockwell, director of vocational education, Fresno, California, both of whom divided their time between instruction and study at the University of California at Los Angeles. In addition Frank Cushman of the Federal Board for Vocational Education, and Leslie G. Stier, assistant director of vocational education for Los Angeles, have aided in instruction in the south. Summer sessions have brought to both centers such national leaders as Dr. C. A. Prosser, president of Dunwoody Institute, Minneapolis; Dr. William J. Bogan, assistant superintendent of schools, Chicago; Robert H. Rodgers, in charge of teacher training at the Milwaukee Vocational School; Milo H. Stuart, and De Witt S. Morgan, principal and vice-principal, respectively, of the Arsenal Technical School of Indianapolis; Dean Bradley, former state director of vocational education in Nevada and now regional agent for the Pacific Coast states for the Federal Board; and George C. Mann, director of vocational education, Berkeley, California.

The quality of the candidates for training has made possible a continued upgrading and raising of the standards for teachers. Four years ago the educational requirement for trainees was raised from elementary schooling to two years of high-school education; and in 1925 the 280 hours of required subjects was changed to 16 units, on a basis of 17 hours of work to the unit, as the minimum requirement for securing a vocational arts credential. After May, 1925, every graduate of the course was required to take six additional units, approved by the Division of Vocational Education, as a condition for securing a long-term credential. This additional work may consist of further educational courses or special investigations in the industrial field in which the candidate holds his credential.

Another important development in raising the standard of the trainees was the establishment in 1925 of a testing program to determine the craftsmanship ability of the trainees. It was found that the lack of standards of efficiency in the industry and the specialization constantly taking place within the industry made the evaluation of the candidates' abilities a difficult thing to measure in terms of the usual statements of experience. A verification from the employer is valuable in determining the period of time the individual has been employed in the industry, but it does not tell adequately the nature of the work, nor the present ability of the candidates. Mr. Mallary and Mr. Johnson were authorized to work out the

details of such tests. To date tests have been given in 23 different trades. The success achieved has been gratifying in setting a high standard for those now seeking admission to teacher training.

Mental tests were inaugurated at both centers in the winter of 1922 and 1923. So far their value is a matter of conjecture when used with adults who come from widely varying social and industrial experiences.

The success of the teacher-training work, both in the north and the south, has been such that it no longer requires solicitation to secure candidates for training. Throughout the state of California teachers are now employed who have had the advantage of this training. They are the best advertisement of the work and it is through them that the largest number of candidates seek to qualify to become teachers of trade and industrial subjects.

Another advance made in the teacher training in the last few years, made possible by the raising of standards of ability on the part of the trainees, is the complete analysis of a trade which is required of each trainee as a condition of completing the course. The excellent work submitted by the candidates has justified the preparation of a number of these into bulletin form for use in the training of other teachers and for the teaching of the subjects for which the bulletins are prepared.

The beginning of the trade-analysis work was established through the Research and Service Center of the Division of Vocational Education at the University of California under the direction of Miss Emily G. Palmer. Mr. Leslie G. Stier was appointed in 1922 as a half-time research assistant to prepare the first bulletin of this type, which was an analysis of the carpenter's trade. This work was done with the cooperation of the supervisor, Mr. Johnson, at Berkeley. Mr. Stier completed two analyses, the carpenter's trade and the cabinet-maker's trade.

Mr. Melvin S. Lewis, formerly state director of vocational education for Idaho, was the next research assistant. He developed two additional bulletins dealing with trade and industrial work—an analysis of the plasterer's trade and an analysis of the automechanic's trade. The demand for the analyses has been continuous since the publication of the first bulletin, calls having come from every state in the union and from many foreign countries. No other activity of the Division has contributed so largely to its national reputation.

Diplomas were first granted to trainees completing the entire course in May, 1922. Prior to that time only a typewritten certificate of completion was granted. Those who had not completed the teacher-training work were required to return to evening or summer school classes to meet fully the requirement for the vocational-arts credential as a condition for renewal. The opposition to this requirement was at first difficult to overcome. It soon broke down, however, when it became evident to those taking the course that it was contributing measurably to their better success as teachers.

Something of the achievement numerically can be seen from the fact that there have been enrolled 1281 men and women at the Los Angeles center and 881 at the Berkeley center since the beginning of the teacher-training work; and, beginning with the class of 1922, there have

been 430 men and women graduated from the Los Angeles center and 273 from the Berkeley center. Over 50 different trades have been represented in this enrollment. Unfortunately it is difficult to interpret the older statistics as to the exact number placed in teaching positions, but, based upon the reports of the last three years, from 85 per cent to 90 per cent of the graduates are in the teaching profession.

A summary of the enrollment for 1925-26 shows that there were 213 men and 31 women enrolled in the teacher-training classes during the year. There were craftsmen from 37 trades represented, distributed as follows:

Auto electricians	2	Forge workers	2
Automechanics	46	Machinists	15
Blacksmith	1	Mechanical engineers	4
Boatbuilder	1	Milliners	12
Bricklayer	1	Office machine operator	1
Cabinetmakers	14	Painter	1
Carpenters	30	Patternmakers	9
Chemist	1	Personal hygienists	4
Commercial artists	3	Photographer	1
Comptometer operator ..	1	Plumber	1
Decorative artist	1	Power-machine operator ..	1
Designer	1	Printers	34
Draftsmen (mechanical) ..	12	Radio operator	1
Draftsman (architectural) ..	1	Sheet-metal workers	6
Dressmakers	13	Telegrapher	1
Electricians	11	Tile setter	1
Electrical engineers	3	Upholsterer	1
Engineers	2	Welders	2
		Supplemental subjects ..	3

The years of experience of the trainees range from 1 to 30, with the median at 12 years. The ages range from 23 to 52, with the median at 34 years. The years of schooling range from 7 to 18, with the median at 12. Thirty-one trainees are college graduates. One hundred and fifty-six trainees have had teaching experience ranging from 1 to 140 months, and only 83 have had no teaching experience.

The future of the teacher-training work is more promising than ever. There is now no question on the part of administrators, or on the part of teachers themselves, that professional training is necessary for instructors of trade and industrial subjects. It will soon be possible to extend the professional requirements and offer further courses for the upgrading of trade teachers.

Local Supervisors Appointed

According to the new plan for local supervision of agricultural instruction four centers have been established in the state from which local supervisors lend assistance to the schools in their districts. E. W. Everett will remain in the San Joaquin valley maintaining his connection with the Fresno State Teachers College and supervising the schools of the valley. Charles Perrin will remain at Chaffey Union High School and Junior College and supervise all the high-school agricultural work south of the Tehachapi. A. G. Rinn of Watsonville goes to the Chico State Teachers College and will supervise schools in the upper Sacramento valley. Howard Chappel of Modesto goes to San Jose Teachers College and will supervise all the high-school agriculture in the coast cities from San Luis Obispo north.

Frank Wiggins Trade School in New Building

All departments of the Frank Wiggins Trade School have moved into the palatial new building, which is complete in every detail. Many unique types of instruction are being offered.

One course is an evening class in ladies' tailoring, where men and women are trained to enter the trade, and where those already engaged in this occupation may receive supplemental training. The instruction covers the entire field of tailoring from the designing, cutting, and making of the garment to the alteration and remodeling of any type of tailored suit, top coat, or dress. Some of the members of the class are employees from well-known tailoring establishments and studios in Los Angeles. Edward E. Barkoff, the instructor, has had many years of trade experience.

Another evening class of interest enters the field of handcraft work, instruction being given in the making of

art objects and lighting fixtures from copper, brass, silver, and Britannia metal. C. W. Wirths, formerly an instructor of art-metal work at the State Teachers' College, Santa Barbara, and now a teacher of art-metal work at the Los Angeles High School, has charge of this instruction.

The scope of the printing course has been broadened by the installation of a monotype outfit. The monotype consists of two related, but distinctly separate units, a keyboard and a caster; and the course of instruction has been divided accordingly so that pupils may take either unit. Because of the individual character of this work, there are no actual classes in monotype instruction.

In the bricklaying course, special interest is being taken by the class in the study of different bonds, such as the Dutch, Flemish, English, herring bone, and basket bonds. Certain jobs of responsibility, calling for actual permanent workmanship, are being contemplated for the board of education on two of the school buildings.

Beauty culture, millinery, carpentry and other building trades, painting and paperhanging, frescoing, and other decorative arts are among the courses offered.

Something New in School Elections

A real election tent, borrowed from the city of Berkeley, with students acting as inspectors and judges of election, was a feature of the election recently held at the Berkeley Part-time High School. The election was carried out in every respect like a genuine municipal election, with the swearing in of officials, and with registration cards, mimeographed ballots, and voting booths. The literacy of some of the voters was challenged by election officials, and the voters challenged were required to read a portion of the United States Constitution to prove their fitness for the franchise. A plan was evolved to have the newly elected student-body officers, together with the governor and lieutenant-governor of each state group, compose a cabinet of the part-time-school student government, and a meeting was arranged for the consideration of the problems of the school.

The accompanying picture gives a glimpse of the election booth during action.

Survey of Office Positions in Eureka

A survey of office positions in Eureka was made by Lena Guidery, director of the part-time school, and Nathaniel Sanders of the commercial department. The survey showed that there are about 300 persons engaged in office work and the number is about equally divided between men and women. Of this number 80 were high-school graduates and 13 were university or college graduates. The largest number, 43, were employed in the three banks and the next, 29, in the offices of the two lumber companies. The gas and electric company, telephone company, hotels, woolen mill, oil company, coal company, newspapers, credit association, and other firms were included in the survey. The median length of service of the office workers was found to be between two and three years. The survey showed that the three largest groups of office workers were stenographers, bookkeepers, and general clerical workers.

The part-time school now has an advisory committee consisting of three prominent men in the community, who are helping to study the employment situation.



Pioneer Days in Part-time Education

By EMILY G. PALMER,
Special Agent for Training Part-time Teachers, University of California.

The state vocational-education act passed by the legislature of 1917 created a great deal of interest outside of school circles, as well as within the teaching profession. The Commonwealth Club of San Francisco appointed a committee to spend one year in the study of the problem of vocational training for the state. The conclusion of the year's study by this group indicated that the only effective method of vocational training for a large number of occupations would be through part-time education accompanying employment. Two years later Dr. Edwin R. Snyder, commissioner of industrial and vocational education, felt that the time had come to make part-time education available to all the employed boys and girls

program of teacher training for the part-time schools. From an examination of the census enumeration of employed boys and girls it was estimated that a larger number of teachers would be needed for this new work. During the winter of 1919-20 superintendents were requested to select outstanding leaders in their schools who should be appointed for a period to a position "upon the teaching staffs of the classes for the training of teachers of trade and industrial subjects maintained by the University of California and the Southern Branch of the University of California." These appointments were financed entirely through federal and state vocational-education funds. The groups of leaders were selected



Proposed Oakland Part-Time High School.

in the state and consequently framed the present part-time-education act which was signed in May, 1919.

The part-time-education act was so drawn that its provisions went into effect gradually. In July, 1919 the portion of the act referring to the education of illiterates went into effect; a year later the section referring to special classes for the boys and girls between 16 and 17 years of age became operative; and by July, 1921, all the provisions for part-time education became effective. It was particularly fortunate that the act was drawn in this way as it not only gave the schools time to study the problem and prepare for this new type of instruction, but it also gave the state commissioner time to make provision for teacher training.

The First Teacher Training

Dr. Robert J. Leonard came to the University of California as professor of vocational education in the fall of 1919. With Dr. Snyder he devised a plan for a state-wide

from three regions—Oakland, Los Angeles, and Fresno—and were brought together at these centers by Dr. Leonard and the State Department of Vocational Education for an initial conference and for a number of later conferences.

The men and women who accepted the appointments to lead the classes for the instruction of prospective part-time-school teachers were:

Oakland Group

R. W. Borst, Santa Rosa
Howard A. Campion, Stockton
J. E. Carpenter, Alameda
Belle Cooledge, Sacramento
P. D. Croney, San Jose
E. W. Jacobson, Oakland
J. L. Kerchen, Berkeley
Herbert Lee, Livermore

Elise Martens, Berkeley
John K. Norton, Oakland
W. W. Patty, Berkeley
E. A. Rippey, Sacramento
Charles L. Searcy, Eureka
Martin Singer, Chico
Marian C. Smith, Berkeley
George H. Thiriot, Oakland

Los Angeles Group

Jean Bernard, Los Angeles	C. E. Morris, Los Angeles
Katherine L. Carey, Los Angeles	R. E. Oliver, Long Beach
William Clayton, Santa Ana	F. L. Thurston, Pasadena
B. F. Enyeart, El Centro	W. B. Violette, Riverside
C. P. Fonda, Inglewood	R. D. Wadsworth, Los Angeles
Eldon Ford, Santa Barbara	Helen S. Watson, Los Angeles
Percy Heron, San Diego	R. M. Westover, San Bernardino
Merton Hill, Ontario	Mrs. M. E. Wilson, Pomona
W. S. Kienholz, Los Angeles	
Herbert M. Morley, Los Angeles	

Fresno Group

H. G. Clarke, Modesto	A. P. Harris, Fresno
E. G. Dudley, Visalia	H. C. Wienke, Fresno

In preparation for the instruction of these classes Dr. Leonard had given his seminar over to the development of instructional material. The seminar, composed of superintendents, assistant superintendents, principals, research experts, and graduate students interested in the field of vocational education, produced, under his leadership, material for a bulletin entitled "An Introductory Course in Part-time Education." To accompany the bulletin were lesson sheets prepared for the use of the classes which were established under the leadership of the men and women named above.

Superintendents and principals were then asked to invite only such members of their teaching force as they expected to transfer to the part-time schools to join these classes. Dr. Snyder cautioned that, "under no conditions should any person be admitted to a teacher-training class unless he or she is a teacher in service desiring to qualify for the work, or an educational administrator responsible for the administration of the act." About 1,500 men and women enrolled for this work and 1,146 completed the course.

At the same time that prospective part-time-school teachers were being instructed, a number of communities were making surveys of their junior employees to determine the nature of the local problem before the establishment of classes. Los Angeles, under the leadership of Vierling Kersey; Long Beach under Agnes Wolcott; Berkeley under W. W. Patty; and Stockton under Howard A. Campion did outstanding work in preparation for the opening of part-time-school classes.

Research for Part-time Education

Dr. Leonard realized that one of the biggest problems in the part-time school was appropriate instruction. He therefore established in the Division of Vocational Education a Research and Service Center to direct the training of part-time-school teachers and to make studies of the occupations of juniors so that teachers of working boys and girls could make their instruction function in the pupils' everyday employment. During the years 1920 to 1922 more than sixty junior jobs were analyzed by various research workers under the direction of this Center. Dr. R. E. Berry made the greater number of these analyses which were all in the field of commercial work.

The large part-time schools were more or less successful from the first even though they inherited such handi-

caps as worn-out buildings, discarded text-books, and, in some cases, teachers whom principals wished to have transferred. However, the real problem was one of leadership and that the larger cities could afford to secure. The smaller part-time schools became the real administrative problem and the attention of the Research and Service Center was turned toward the solution of that problem. Two bulletins appeared as a result—the annual report of the Stockton Part-time School and Dr. Berry's study of the administration of the part-time school in the small community.

Further efforts to assist in this problem were made by visits to the various part-time schools, by arranging regional conferences, and by correspondence with part-time-school teachers. In May, 1924 and again in 1925 the assistance of Irvin S. Noall, formerly specialist in part-time education for the Federal Board for Vocational Education was secured. He visited forty of the smaller communities of the state to give them specific help with their problems. Mr. Noall also collaborated with Miss Palmer in the preparation of a bulletin entitled "The Part-time School and the Problem Child."

The Present Status of Part-time Education

During these years the part-time schools have been growing rapidly in enrollment and in improved methods of administration. The enrollment has increased from nearly 7,000 in the year 1920-21 to over 22,000 in the year 1925-26. These numbers, however, have little significance unless the stories of the individual pupils are known. The unfortunate child, the problem child, and the wayward child have all presented themselves to the part-time school. If the value of the work of the part-time school in serving as a steadying influence, in changing ideals, and in increasing efficiency could be measured the support of part-time education would be unquestioned.

A few cities have planned special buildings for their part-time schools, notably Los Angeles and Long Beach; others have new buildings in contemplation. The accompanying cut shows the front elevation of the proposed part-time high school in Oakland. Pittsburg has the distinction of having a part-time-school building constructed by the boys in the school. San Francisco, San Jose, Fresno, Sacramento, and Huntington Park have adapted old school buildings to serve for the part-time classes; a few other schools have taken rooms in office buildings; and still others are in parts of high-school buildings.

A group of outstanding men and women have developed as administrators of the part-time schools so that there is now effective leadership in most of the communities of the state. Education of young people is and should be a matter of leadership and no community can hope to see successful work done in a pioneer field without the proper leadership.

The training of teachers for the part-time schools has steadily developed from that first course given in 1920. As the problems inherent in the school have been analyzed, the courses have been adapted to the conditions. The social and psychological phases, as well as the vocational phases of the problem, are being stressed. The present list of courses provided by the University of California for the training of part-time-school teachers will be found elsewhere in this issue of the NEWS NOTES.

The Next Step

The part-time-school act has a number of defects which have appeared as the schools have attempted to administer the act. In 1925 a bill was framed to correct some of these defects, but though it passed both houses it was vetoed by Governor Richardson. In 1927 still another bill was framed and reached the hands of Governor Young. Unfortunately it was found to have certain technical errors which it was then too late to change. The friends of part-time education asked the Governor not to sign the bill. The next big forward step in part-time education, however, will come with the passage of a bill to extend the privilege of part-time education to the limits of the various high-school districts, and to extend the period of supervision of unemployed boys and girls to twenty hours a week. Superintendent Cooper is appointing a committee to draft such a bill for the next session of the legislature.

A Phase of Vocational Education in California

By IRA W. KIBBY,

State Supervisor of Civilian Rehabilitation.

The state of California recognizes that every inhabitant of the state should be given such training as will make him an efficient citizen and a gainful producer. It has, therefore, not only arranged its secondary school program so as to provide such training, but it has also established adult classes to give training in citizenship and occupational pursuits.

It was found, however, that many of its citizens who were trained and were earning a good livelihood were suddenly cut off from following their chosen occupation. An accident or disease left them without the full function of their physical bodies.

In order to again fit into society, occupational adjustment had to be made. A new vocation had to be mastered. Further vocational training was therefore necessary. The state of California realized its obligation to assist such individuals to again become self-sustaining. Therefore, in cooperation with the Federal Government, the Division of Civilian Rehabilitation was established as an integral part of the State Department of Vocational Education.

The counselling, training, and placing of those who unfortunately sustained handicaps that materially impeded their earning capacity, has now become a firmly established educational function of the State Department of Vocational Education in California.

The number of handicapped people who are receiving the rehabilitation service in California has increased from 246 in December, 1924, to over 700 in April of the present year. The division has rehabilitated and turned back into gainful employment over 700 of these handicapped individuals. The service has been extended into every part of the state. The work is handled through the state supervisor, assisted by two district supervisors and two training officers and the clerical staff. The division maintains three officers, one in Sacramento, at the State Capitol, one in San Francisco, and one in Los Angeles.

A system of local agents to handle the work in the interior centers is being established. The community is beginning to realize its obligations and is assisting in the work. The various cooperative agencies such as the Industrial Accident Commission, the State Compensation Insurance Fund, and the various welfare organizations are cooperating in the program. The people of California believe that every individual should have an opportunity to earn a fair livelihood and are heartily supporting the rehabilitation service. (American Vocational Association *News Bulletin*, August, 1926.)

Part-time School Exhibit in Martinez

As a part of the Home-coming Day program of the Martinez High School, the Part-time School Department prepared an exhibit in the downtown cottage, which is the home of its activities. Posters hung about the rooms, showed some symbol of the occupation of the various pupils; for example, an oxford shoe indicated that one boy was a shoe salesman; a milk bottle indicated that another pupil worked in a dairy. A large relief map of Contra Costa County, made by the pupils, showed the study of local geography; and a products map showed the recent study of the flood area in the lower Mississippi valley.



Girls Learn to Decorate Furniture.

A display of dresses and other garments made by the girls showed not only a skill in stitchery, but also an ability of the girls to make over garments for themselves or for their younger sisters.

The entire cottage was cleaned, painted, and tinted by the girls and boys of the part-time school. The curtains and furniture were also made by the pupils. The accompanying picture shows two of the girls painting chairs for the cottage. A complete kitchen equipment, radio sets, drawing materials, and commercial equipment spoke for some of the many other activities of the school.

Pupils, employers, and parents came and went during the entire day, as the Part-time School kept open house and welcomed the opportunity to show some of its objective accomplishments.

Occupational Studies

The occupational research section of the National Vocational Guidance Association has recently made a critical bibliography of occupational studies produced in pamphlet form. The studies reviewed are those published by the following institutions:

- University of California, Division of Vocational Education.
- Cincinnati Public Schools.
- Harvard University, Bureau of Vocational Guidance.
- Board of Education of the City of New York.
- National Research Council, Division of Educational Relations.
- Federal Board for Vocational Education.
- Detroit Board of Education.
- University of Michigan, Department of Vocational Education.
- Chicago Board of Education.
- Minneapolis Public Schools.
- Indiana University.
- White-Williams Foundation.
- New Orleans Public Schools.
- Cleveland Public Schools.
- Wisconsin State Board of Vocational Education.
- Pittsburgh Public Schools.
- Milwaukee Vocational School.

A copy of the bibliography may be purchased from Miss May Rogers Lane, Research Supervisor, Board of Education, Cleveland, Ohio, for twenty-five cents a copy.

Annual Conference of Agriculture Teachers

Programs will soon be out for the annual conference of agriculture teachers which will be held in Berkeley during the first week of summer session on July 1 and 2. Charles Perrin of Chaffey Union High School is president of the California Agriculture Teachers Association, and Walter Patchet is secretary.

Graduation Held at San Jose Part-time High School

The San Jose Part-time High School held its annual graduation exercises in its own auditorium on May 12 for a class of ninety-two pupils. The pupils who were graduated had completed their work for the year early as many of them are employed in the canneries which have opened for the spring season.

George C. Mann, director of vocational education in Berkeley and principal of the Berkeley Part-time High School, was the commencement speaker. He discussed the subject, "The Advantages of Part-time Education" before an auditorium filled to capacity with the large audience of parents and friends of graduates which had gathered. Certificates were presented by Andrew P. Hill, Jr., assistant superintendent of schools, and a musical program was given by members of the class.

The annual commencement program and all that it means is one of the chief features of the San Jose Part-time School. It is felt that this goal serves as a spur to regularity of attendance and ultimate accomplishment.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE

UNIVERSITY OF CALIFORNIA AND OF THE STATE BOARD OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 3. Bulletin No. 2. An Analysis of Department Store Occupations for Juniors. December, 1920.
- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921. (A revision of Leaflet No. 2.)
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921. (Out of print.)
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 9. Bulletin No. 7. The Work of Juniors in the Telegraph Service. April, 1922.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 11. Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922.
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Determining Factors in Successful Cooperative Trade Training

By FRANK CUSHMAN

Chief, Trade and Industrial Education Service, Federal Board for Vocational Education



California, unquestionably, is facing the problems which naturally result from a large expansion of the vocational departments of its high schools. These problems are acute in proportion as the objectives of actual vocational education are regarded as important. If matters are allowed to develop in such a way as to cause most of the vocational departments to function as agencies of general education, the cost of operating them will probably be seriously questioned. The easiest way to meet the criticism will be to formalize the instruction more and more upon an exercise basis in order to make it easier to handle larger classes and thereby reduce the per capita cost of this type of education. In proportion as this is done, vocational education in the true sense of the word will disappear from the high schools, and the job of preparing girls and boys for the occupations which they are going to follow, will be taken from the public schools. Such a result will not in the slightest degree indicate that vocational education will have ceased to operate; it will simply mean that the schools will have turned their backs on the job to be done because of the difficult problems involved. Vocational training will again become the sole responsibility of industry: a task for which it has already demonstrated its inadequacy.

California Adopts the Cooperative Plan

One of the most promising developments that has occurred in California is the growth of part-time cooperative training. As has been pointed out many times, the full-time-pre-employment trade school is inherently inefficient for a number of fundamental reasons. Although many vital factors characterize efficient trade and industrial education, a brief consideration of only three of the more important of these will suffice to point out a few essential requirements of successful cooperative trade training.

Three Training-Essentials

In the first place, a program of trade and industrial education will be efficient only in proportion as the students are selected with regard to the probability of their utilizing their training in industry later on; in other words, in proportion as those receiving the training need it and will actually use it in earning their livelihood.

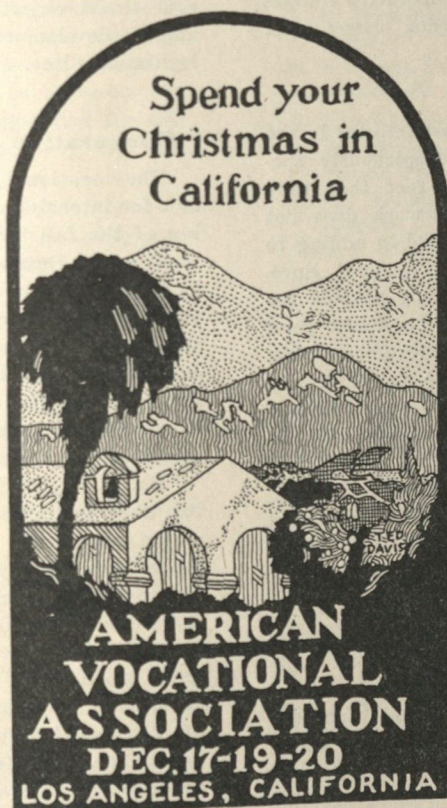
In the second place, such a program will be efficient only in proportion as training is given on actual jobs or in practical work which is similar in all respects to the kind of work which the learner may be expected to do on completion of his course.

In the third place, a program of trade and industrial education will be efficient only in proportion as those completing the training are properly placed in industry with regard to their ability, and are afforded an opportunity for extension training which will not only make them more efficient in their chosen work, but will also equip them to steadily advance.

Trade Training not a One-Institution Job

Any trade school or vocational department in a high school which confines its work within the walls of a school building, will experience great difficulty in meeting the three conditions indicated in the preceding

statements. It is extremely difficult to devise a scheme which will work effectively in sifting out boys and girls who, after leaving school will actually use their training in the occupation for which it was offered. Furthermore, it is difficult to select from any important trades the material necessary to provide practical productive work within the confines of a school building. When this is not possible, it becomes necessary to organize the shop work on the basis of assigned exercises and practice jobs.



Jobs versus Diplomas

Because of the need of conforming to established school procedure, it is customary to hold graduation exercises and give diplomas to high-school graduates who have been trained in the vocational department. This practice tends to unload rather large groups of graduates on specified dates, quite regardless of the opportunities for employment which prevail in local industries. In many cases schools do not feel any particular responsibility for placing their graduates; consequently, many of them drop into various lines of employment where the specific training which they are supposed to have received amounts to very little as a direct asset.

Pupils who make good in the part-time course are actually employed before they sever their connection with the school, and contrast well with pupils who on graduation are placed by the departments of placement and follow-up service which often function more or less artificially. Moreover, these employed students have acquired the habit of looking to the school for the type of instruction and training which will enable them to become more efficient on their jobs. Experience confirms the belief that graduates of part-time cooperative courses naturally look toward evening-trade-extension classes after completing their part-time work.

Education à la Carte

Very often, young people who have lost interest in the more general fields of education are conspicuously successful under the part-time plan. The fact that they lose interest temporarily in their school work does not mean that they will never become interested in adding to their educational equipment along more general lines. With existing opportunities in free evening schools for general education in all fields, there seems to be no good reason for frowning upon the development of part-time cooperative training for the younger group on the ground that it tends to limit their opportunities for general education. There is no really valid reason why a person should not add to his general education in evening schools and classes after having acquired the degree of knowledge and skill which enables him to make good on a practical job.

Success of Plan Rests with Teachers

As stated before, the development of this idea is, in the opinion of the writer, one of the most promising features of the present situation in California in so far as trade and industrial education is concerned.

The success of such a plan is dependent more upon the type of instructor secured than upon any other single factor. The development of cooperative work calls for instructors who are really interested in getting tangible results in the field of vocational education—men who would be unhappy if forced to work in a stereotyped situation where the results are general and difficult to identify.

Industry Welcomes Cooperative Plan

Experience in the limited development which has thus far taken place in California shows rather conclusively that industry is friendly toward cooperative trade education, and that it will meet the school more than halfway in the further expansion of this movement. Progress

along these lines will necessarily be slow and sure rather than swift and spectacular. There is not very much, if indeed anything, connected with the development of the best types of vocational education, which is especially showy.

Expensive Plants not a Necessity

Part-time cooperative work does not call for monumental buildings with expensive equipment. On the contrary, shops and buildings can be decidedly limited with respect to visible equipment, provided instructors of the right type are secured. In view of the steadily increasing cost of all forms of education, particularly of secondary education, the logical thing would seem to be to direct more and more attention to the development of part-time cooperative courses, especially in view of the fact that an increasing number of people who are studying the problems of industrial education, and who have studied them for years, are of the opinion that there is little justification for expensive shop equipment in the senior high school, unless it is used in a practical way in terms of vocational education. This remark should not be construed to refer to work below the senior high school where recognized, general educational objectives combined with vocational guidance and the development of appreciation have an important and legitimate place.

Cooperative Program Initiated at San Jose

The vocational instructors of the San Jose High School met for intensive conference the week preceding the opening of the fall term of school.

John C. Beswick, chief of the Bureau of Trade and Industrial Education of the State Department of Education, started the conference by introducing the problems which the local community will have to meet in carrying out the revised California Plan for Vocational Education. His chief emphasis was on the cooperative type of vocational training which San Jose will introduce this year in all of the vocational courses.

Mr. A. R. Nichols, director of vocational education, San Jose, has provided his vocational instructors with an opportunity to use a part of their time in placing advanced students in employment situations in the community and in coordinating their daily programs in the light of the individual needs of each student.

The conference was conducted for six hours a day from Monday to Friday inclusive. Mr. B. E. Mallary, supervisor of vocational teacher training of the Division of Vocational Education, University of California, conducted the conferences in the morning and emphasized the problem of the methods of organizing and instructing in the related trade and related technical work. In the afternoon Mr. Nichols led the conferences and worked out with the teachers the San Jose program for the current school year.

San Jose discontinued its pattern shop this year and is introducing a cooperative course in plumbing.

Director Nichols has full charge of all evening-trade-extension work and is rapidly organizing such classes in several occupations. In most cases these classes are being organized through the advisory committees made up of employers and workers.

Superintendent Cooper Calls State Conference on Part-time Education

The first state-wide conference on part-time education to be held in California assembled at the call of State Superintendent of Public Instruction William John Cooper in Fresno on October first. The real interest that exists in the work of part-time education was shown by the large and varied audience which gathered and took active part in the discussions. Views on the subject were presented by part-time-school workers, attendance supervisors, probation officers, high-school principals, city superintendents, county superintendents, principals of Ione and Whittier state schools, representatives from state colleges and the University, state education officials, and the state superintendent of public instruction. The morning session was devoted to the discussion of part-time problems in urban areas and the afternoon to the problems of rural areas. The chairman for the morning was Mr. Nicholas Ricciardi, chief of the division of city secondary schools; the chairman for the afternoon was Miss Helen Heffernan, chief of the division of rural education.

Mr. Ricciardi in opening the conference said that the purpose of the convention was to give opportunity for the presentation and discussion of part-time problems. He accented the fact that a careful study of the status of part-time education in California was to be made, and announced that a committee would be appointed for this purpose. This committee, appointed jointly by Mr. Ricciardi and Miss Heffernan, is as follows:

Chairman

VIERLING KERSEY, Assistant Superintendent of Schools, Los Angeles; Director Metropolitan High School, Los Angeles.

Executive Secretary

MARY F. MCREEDY, Acting Supervisor Research and Service Center, Division of Vocational Education, University of California.

Coordination Committee—Vierling Kersey, Chairman.

John E. Carpenter, Principal, Part-Time High School, Sacramento.

George C. Mann, Director of Vocational Education, Berkeley.

DeWitt Montgomery, City Superintendent of Schools, Visalia.

Walter B. Crane, Principal, Metropolitan High School, Los Angeles.

Member-at-Large—Mrs. Lillian B. Hill, Chief of the Bureau of Attendance and Migratory Schools.

North Region Committee—John E. Carpenter, Chairman.

Louis F. Best, Supervisor of Attendance, Sacramento.

Sherman Brown, Principal, Chico High School, Chico.

Edwin C. Browne, Principal, El Dorado County Union High School, Eureka.

O. H. Close, Superintendent, Preston School of Industry, Ione.

Lena Guidery, Director, Part-Time Department, Chico.

C. E. Warren, Principal, Marysville Union High School, Marysville.

C. E. Wilson, Sacramento County Probation Officer, Sacramento.

Bay Region Committee—George C. Mann, Chairman.

J. C. Astredo, Chief Probation Officer, San Francisco.

R. C. Bowman, Director of Attendance, Oakland.

William J. Hanlon, County Superintendent of Schools, Martinez.

Harry G. Hansell, Acting Principal, Part-Time High School, San Francisco.

M. E. Hurley, Principal, Part-Time High School, Oakland.

Mrs. Margaret Lomax, Director, Part-Time Education, High School, San Jose.

Mrs. Anna L. Saylor, Director, State Department of Social Welfare, San Francisco.

Mrs. Louisiana F. Scott, County Supervisor of School Attendance, Martinez.

Central Region Committee—DeWitt Montgomery, Chairman.

R. F. Aspinall, Principal, E. R. Snyder Continuation School, Fresno.

S. J. Brainard, Principal, Tulare High School, Tulare.

J. W. Byfield, Supervisor of Attendance, Bakersfield.

J. W. Canfield, State Teachers College, Fresno.

C. V. Denman, Director, Part-Time Education, High School, Santa Barbara.

T. S. McQuiddy, Principal, Watsonville High School, Watsonville.

J. R. McKillop, Principal Selma Union High School, Selma.

H. A. Spindt, Principal, Kern County Union High School, Bakersfield.

South Region Committee—Walter B. Crane, Chairman.

C. K. Berger, Director Part-time Education, High School, Pasadena.

W. H. Holland, Chief County Probation Officer, Los Angeles.

John R. Hunt, Supervisor of Attendance, Los Angeles.

Benj. W. Johnson, Assistant Director, Division of Vocational Education, University of California, Los Angeles.

P. E. Klein, Principal, Part-Time High School, San Diego.

Arthur E. Paine, Director of Part-Time Education, Huntington Park.

Agnes Wolcott, Principal, Part-Time High School, Long Beach.

A second conference will be called, a year hence, to discuss the results of the work of this committee. A committee will then be appointed to draft legislation (based on the findings of the present committee) to be presented to the legislature at its next session as a basis for part-time legislation in the state.

The conference itself consisted of a speech by Mr. Cooper, state superintendent of public instruction, on "My Conception of Part-time Education for Minors," and the presentation and discussion of four fundamental problems of part-time education, viz., compulsory attendance of twenty hours for the unemployed youth; guidance, placement, and follow-up; exemption; and the minimum number for the compulsory organization of part-time classes.

A full copy of the proceedings of this conference, together with a calendar and program of committee work, and the address made at the recent superintendents' convention at Coronado Beach, by Dr. Edwin A. Lee, director of the Division of Vocational Education, of the University of California, on "Some Problems in Part-time Education and Their Solution," will be distributed shortly.

Problems in Cooperative Education

By WILL C. MATTHEWS
Industrial Coordinator, Oakland City Schools.

The secondary school has been given the responsibility of providing vocational education for youths who wish to enter trades and industrial occupations. If the school accepts this responsibility, it incurs the obligation to carry on its work in the most economical and the most efficient manner possible. The school must not only train the right number of young men and women for the available jobs, but it must also aid them as wage-earners to enter advantageously into their chosen occupation.

Through the financial aid and excellent promotional work of both the Federal Board for Vocational Education and the state departments of education, the schools have set up remarkably fine training-programs. The employment of skilled mechanics as teachers and the installation of good equipment have made possible real vocational training. When the different levels of attainment are considered through which the learner must pass to gain proficiency in a skilled trade, it is evident that, under modern conditions, organized instruction can be more economically and more quickly given in the school than in the commercial shop. Now, if the commercial shop would accept the learner at the level of accomplishment reached in his school training, the vocational programs commonly carried on would be adequate.

But the fact has become recognized that, despite the excellent teaching the youth receives in school, the employer will not, in most cases, accept him in any capacity other than that of a mere learner. This is probably as it should be, yet certain factors make the situation a serious one.

In the first place, if the boy spends four years in school training for a skilled trade, he feels that he should not have to re-serve his entire apprenticeship in the commercial shop, beginning, as he must, at a very low wage. Often the boy who is faced with a situation of this kind will get discouraged and take some job for which he has not been trained. In such cases the training of the school will not have functioned, yet the employer cannot be blamed for his stand. The increasing specialization of commercial shops makes it impossible for the school shop to meet the demands of the individual employer.

In the second place, certain elements necessary to thorough vocational training can be learned only in the throbbing atmosphere of the commercial shop. A real appreciation of the value of time; a real understanding of the cost of production; a true conception of the fact that a commercial shop must earn money—these no school shop can teach.

School and Industry Must Cooperate

Consequently, in order to give the boy a thorough vocational training, school and industry must work in mutual understanding. The school must give the boy the necessary training which industry under modern conditions cannot afford to give him, and industry must give the boy a chance to adjust himself to the wage-earning environment as a part of his training program.

The cooperative plan for trade training is an attempt to make possible a genuine cooperation between school and industry for the betterment of all concerned. It purposes to induct the learner into industry at an age and at a level when he is psychologically and economically best qualified. The plan consists in letting the boy go to work for a part of his school time as a wage-earner in some commercial shop where he will work under the direction of a foreman. The boy may spend one day in the shop and the following in school; or, he may alternate his time on a half-day, a week-about, or two-weeks-about basis. Each time apportionment has its advantages and disadvantages.

From the point of view of the school administrator, a half-day alternation seems to be less disconcerting; but from the employer's standpoint, the week-about plan seems more advantageous. From a purely educational side of the question, it may be preferable to keep the interval away from school short. Since the school is more or less dependent upon the cooperation of the employer, it must at first cater to his wishes. Later, when the experiment has developed into an established procedure and there is agreement between school and employer, a sensible alternation of time will no doubt result naturally.

Program-Making Involves Difficulties

If it were possible to initiate a program of cooperative education by taking a sufficient number of pupils at once from a given high school and placing them on a week-about schedule on a "work-and-school" basis, special classes could easily be set up to handle the situation. But since it is a comparatively new thing, involving in its beginnings only one or two boys at a time, it becomes a real problem for the school to arrange programs for these students. Because the shop teachers give instruction of a more individual type, they can adapt their schedules more easily than can the academic teachers. Teachers of related subjects can readily handle irregularities in schedule by putting the work on an individual-problem basis. Of course, if the high school were organized on some plan of individual instruction similar to the Dalton plan, a pupil missing a week could, on his return to school, begin at the point at which he left. To expect the whole school program to be reorganized for the sake of a few cooperative pupils would hardly be justified; yet, it must be remembered that "all big worth-while things have small and difficult beginnings."

Promoter May Become Buffer

The promoter of a program of cooperative part-time education has a dual difficulty to overcome. On the one hand, he must convert the high-school principal, the shop teachers, and the academic teachers to a belief in the virtue of such a scheme; on the other, he must sell the idea to the employer. Neither task is difficult. The philosophy of the plan is easily grasped; both sides admit its value. But when any unhappy occurrence takes place,

the promoter becomes a buffer between the school and the employer. If a boy falls down on the job, or fails to play square with the school, a tactful handling of the case is necessary to keep both sides pacified.

Superior Boys Must Launch Program

To assure a sound beginning of cooperative work, it is absolutely necessary to select superior boys who will not only reflect credit upon the teacher and school, but whose work will also convince the employer that the scheme is a good one. Since there is a too prevalent suspicion on the part of employers that school-trained mechanics are a nuisance, it is doubly important to select boys whose performance will be most apt to destroy this prejudice.

After the cooperative program is well under way, its promoters should guard against concentrating their efforts upon the superior boy only. Industry calls for all types of human ability, and any scheme of vocational education which does not recognize this important fact defeats its own purpose. The trade school should become a selective agency fitting the right boy for the right place. The place may be a job of operating a fool-proof machine, or it may be a responsible job requiring ingenuity and skill. Each boy should have an educational opportunity commensurate with his capacity.

Shop Teacher Must Select Future Employee

It is well to mention another precaution dealing with the selection and placement of the boy under a newly introduced cooperative plan. It is obvious that the major teacher of the boy, the shop teacher in this case, is the only one competent to select the prospective mechanic from his class, although the principal of the school and other officers may pass on the boy's character. Interviewing the employer should be the responsibility of one person only, the director of the program. If every teacher, boys' counselor, and principal should attempt to find employment for the boy, a waste of the employer's time would result and an undesirable competition between schools might spring up. Each principal should set up a procedure by which the promoter may secure his boy. The principal may wish every boy to go through his hands directly, or he may delegate this authority to some member of the teaching staff; but in no case should the promoter negotiate with the teacher without proper authority from the principal.

The Cooperative Plan Benefits the Teacher

Misunderstandings may arise among the shop teachers, who may feel that the cooperative plan is an entering wedge to force them out of employment. Such an attitude is wholly unsound, for without the day unit trade courses, the cooperative plan could not function. There must be a place from which suitable, "tried-out" boys can be drawn. This place is obviously the school shop. Moreover, a cooperative plan does not relieve the shop teacher from his responsibility of teaching the trade; on the contrary, it adds to his other duties the duty of coordinating the work of the school with that of the job. Through the contact of the boys with actual shop conditions and real shop problems, the school work receives a stimulus without which it could not function effectively in the

long run. Since the teacher holds the power of recommendation, he can use it as leverage for better class work.

Shops Must Be Classified

Mention has already been made of the fact that the school must serve as a selective agency, selecting the right boy for the right place. This responsibility falls to the promoter, who must make a classification of all employment places on the basis of their learning opportunities. He may find a fine, orderly shop apparently filled with busy mechanics; but on investigation, it may turn out that only one or two expert mechanics are employed, while the many machines are operated by mere machine operators repeating the same processes over and over again. To place a highly superior boy, a born mechanic, in such a place would certainly result in dulled enthusiasm on the part of the boy. Only if the shop superintendent has agreed to put the boy through a genuine learning process, should the superior boy be placed in a shop of this kind. Under such an agreement the boy has a learning chance; without it, exploitation may cause the chief aim of the cooperative plan to remain unrealized. A place affording only a limited learning situation must be classified as a production plant not to be used without agreement in the placement of superior boys. As the program expands the promoter can easily supply the boy of limited ability who will be happy and useful in a mere operator's job.

Repair shops and general jobbing shops offering a variety of experiences furnish the best employment places for students on a cooperative basis. Since shops are becoming more and more specialized, the smaller plants often offer the greater learning opportunities. The sheet-metal shops may serve as an example of the tendency toward increasing specialization. One shop may specialize in ventilation work, another in general building jobs, a third may do only kitchen and restaurant equipment work, and so forth. Thus a boy having learned his craft in a cornice shop may know nothing of the work of the sheet-metal worker in ventilation. The training problem is obviously difficult and seems to be capable of one solution only: assumption on the part of the school shop of responsibility for the general or all-round training.

Specialization is an Advantage

Due to the increasing tendency toward specialization mentioned above, the employer is usually anxious to have a boy willing to learn the specialty of his shop and will often not consent to a plan which calls for the continual breaking in of new boys. This plan prevents the school from moving the boy from shop to shop to gain varied experience. The disadvantage is only apparent; in an age of specialization it is an advantage to a boy to become a specialist, provided he has the background necessary for specialization. The automechanic's trade is generally regarded as a unit; yet investigations reveal that all large garages demand specialists in the different cars; Cadillac, Buick, Dodge, and so forth.

Peak Loads Create Problem

Many other questions may arise for which there seems to be no definite answer as yet. A case may be cited in which the employer wants a boy or two to help him over

a peak load in the shop. Often an employer does not have sufficient work to keep the boy continuously, but is the school justified in supplying his irregular demands and becoming a mere reservoir for ready workers to be drafted at any time when they may be needed?

Wages Must Be Regulated

The matter of wages is another important question in the organization of a cooperative plan. To make a job a genuine working experience a wage must be paid. If the employer has no investment in the boy in the form of wages, he cannot be expected to interest himself in the boy's work. Over-payment sets a bad precedent for other boys and may cause him to forget that he is a learner. Too small a wage may discourage the boy and encourage his exploitation as cheap labor. If one employer pays a larger beginning wage than another, his action will offer grounds for discontent. But if the boy increases his wages while on the job, his increase may be justified on the basis of personal efficiency.

School Should Cooperate With Unions

In communities where organized labor is a dominant force, the cooperative work must necessarily line up with the apprenticeship program of the organization. Since the function of the trade school is to supply the local demand, the school must necessarily cooperate with the unions if it is to train workers for the strongly organized trades. Such cooperation would come under the special apprenticeship program which provides for apprenticeship classes run by the school with the advisory aid of the committee of journeymen and employers. The school, however, is a public institution, and while it should cooperate with the unions, it should not be dominated by them. If an employer wishes to employ a boy on the cooperative plan, the school should send him the boy, even in the face of possible opposition from organized labor.

Oakland Teachers Lend Support

No doubt, many points have been overlooked in the present discussion, but in general it follows the cooperative part-time education plan carried on in the Oakland public schools under the direction of Mr. L. B. Travers. The inauguration of this program called for the whole-hearted cooperation of the superintendent of schools, the high-school principals, and the teachers. In every case these officials responded in the most encouraging manner. They are to be congratulated for bearing up under the trying circumstances that always go with the promotion of a new plan. Oakland teachers have helped in realizing the trend of modern educational development which aims at tearing down the wall separating the school from the activities of the outside world. The cooperative plan, together with certain other phases of school work; such as, the evening-trade-extension program, the evening-avocational course, and the apprenticeship programs, tends to bring the people of the community in direct contact with the school and to make this a more vital factor in community life. But the dominant feature of cooperative part-time vocational education is the fact that it enables the boy or girl to make his or her occupational adjustment at a time when the school can be of the greatest assistance.

A System of Workable Charts in the Shop

By L. M. SPARKS

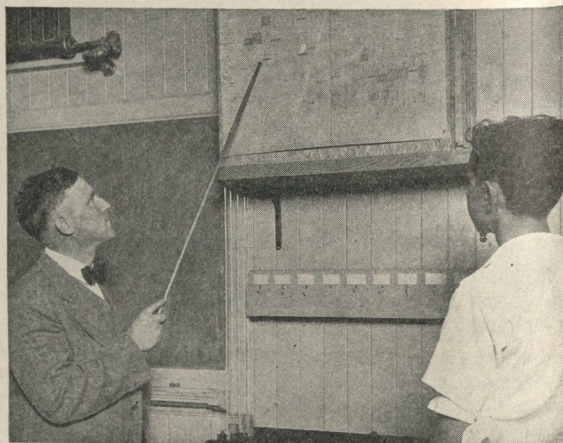
Instructor of Automechanics, San Jose High School.

In the opinion of many vocational instructors, an efficient and accurate chart system showing the progress made by the boys is one of the greatest assets of a well-organized and well-disciplined shop. To be sure, no system in vocational shops is absolutely accurate, but the least the teacher can do is to work toward a goal of one hundred per cent efficiency.

After a careful study of chart systems used in different schools and commercial shops, a system was devised not only to meet the needs of the instructor, but to resemble as closely as possible actual commercial-shop conditions. After being used in both junior and senior high schools, this system was found to have at least two good points: First, it held the interest of the boys and increased their sense of responsibility toward their work; second, it practically eliminated all discipline problems.

Charts Develop Responsibility

In order that progress charting may develop a sense of responsibility in the shop boys, the chart must be open to inspection and the boys must thoroughly understand its operation. When boys are able to watch their progress for several weeks before report cards are due, they will often plan ways and means to raise their grades. A chart system brings their standing home to them in a forceful manner, whereas an oral warning from the instructor seems, as a rule, like the proverbial pouring of water on a duck's back. The boy does not realize the earnestness of the instructor until it is too late and a disappointed boy has resulted. Without something more explicit and concrete to back them up, oral warnings are of little use.



Detail of Record Chart.

To illustrate a case in point the following incident may be cited. A boy became angry on finding a low grade on the chart for both work and deportment. His job card for the previous week was quietly handed him for inspection. The expression of the boy's face changed

from anger to embarrassment and, handing the card back, he pleasantly remarked, "Well, I am pretty lucky you didn't give me a lower grade on such a record as that." In this case a difficult situation was easily met by reference to the chart system, which arbitrated satisfactorily between the boy and the instructor.

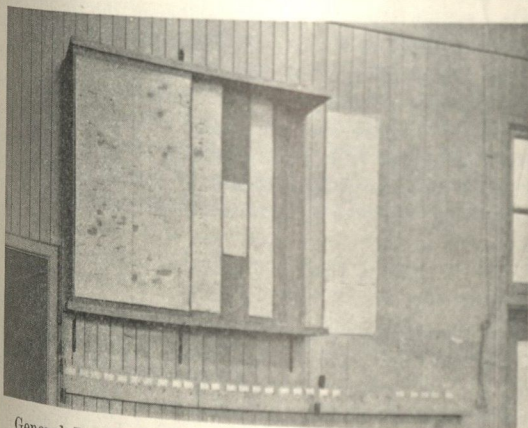
Method of Chart Construction

A glance at the accompanying illustrations will show the essential elements in the construction of the chart under discussion. The chart rack may be constructed to suit the particular needs of any shop with reference to size, number of chart slides, and type of construction.

The trade taught is blocked off into divisions and subdivisions which are each given a number. The automobile mechanic's trade may serve as an example. The block unit on the motors is assigned the number 14, its subdivisions including bearings, valves, and pistons, are given the numbers 14.1, 14.2, and 14.3. The weekly record chart mounted on sliding boards is ruled into vertical and horizontal columns. The weeks of the school year are noted in the vertical columns; the names of the boys, their jobs, grades, and deportment, in the horizontal.

How Charts Are Used

Each Monday morning the student takes a job card covering the week which is marked off into days. When the card is filled at the end of the week, he is graded on both work and deportment. His complete weekly record is then entered on the wall chart.



General Layout of Job Listing, Chart Work, and Job Card Rack.

As the boys enter class to begin work, they remove their cards from the rack, hook them on nails outside of the rack as shown in the illustration, and at the end of the period return them to their respective places after the number of the particular job worked on has been entered for the day. The object of hanging the cards on the outside of the rack is to check absentees; for instance, if no card is hanging on number four, a glance reveals that he is absent. This method simplifies roll call. If a boy is careless and leaves his card out after leaving class, it is put back for him with a notation resulting in a lower grade at the end of the week. The boys seldom leave their cards out more than once.

A breach of discipline or of shop rules noticed by the instructor is not taken up at the time, but a notation regarding it is made on the back of the boy's card. The embarrassment caused by this quiet action on the part of the instructor is much more effective than a "bawling out." The boy may not realize until the following Monday morning when he examines his card that his infraction of the rules has been noticed, but this method will soon practically eliminate all discipline problems.

Charts Aid in Record-keeping and Teaching

At the end of the semester or of the school year, the charts are taken down from the sliding rack and filed away for future reference. They are especially valuable in trade work, for a grade gives only a slight evaluation of the boy's ability, unless it can be backed up by a record of the exact jobs upon which he has worked. Where a cooperative program is carried out, the value of such a chart should be greatly enhanced.

The chart system outlined above gives the teacher not only more time to devote to instruction, but also lightens his work and brings him to the realization that there is far more in teaching than hard work. It increases the boy's responsibility, promotes pleasant relationships between instructor and boy, and creates an efficient shop organization for the profit and enjoyment of all concerned.

A New Course for Shop Teachers

According to a recent ruling of the State Department of Education, separate high-school credit in industrial drawing, industrial science, and industrial mathematics will be given to students who study such subjects under their shop teacher. The time spent by the student on his related subjects will be in addition to the 50 per cent now devoted to applied work. In order that students may receive separate credit, the shop teacher must possess a State credential to teach industrial drawing, industrial science, and industrial mathematics related to his trade. These subjects will be added to the credentials of shop teachers who satisfactorily complete six units of work in the Division of Vocational Education of the University of California in special classes organized for the purpose of training trade teachers to teach the related-subjects content of their trades.

Approximately 108 hours of classroom attendance will be expected from the candidates who wish to be accredited with six units by the Commission of Credentials.

The class organized for the fall session meets Tuesday and Thursday nights in Haviland Hall, University of California. Other classes will be organized during the summer session. The instruction is given on an individual basis entirely. Each member of the class is studying the related work of his specific trade. The related work is treated as a unit without any attempt at a division of its three phases.

Graduates of the Teacher-Training Course who are not teaching Smith-Hughes classes at the present time, but who wish to have the above mentioned subjects added to their credentials, may enroll in the class.

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Trade and Industrial Education Agriculture Education

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MISS PALMER AT COLUMBIA UNIVERSITY

Miss Emily G. Palmer, special agent in charge of the Research and Service Center of the Division of Vocational Education and editor of the "Vocational Education News Notes," is spending the year at Teachers' College, Columbia University, where she is pursuing work toward her Doctor's degree. Miss Palmer left Berkeley in time to enter the summer session at Columbia. She plans to return to Berkeley for the beginning of the academic year 1928-1929. Recent letters indicate her great delight in the experience and splendid progress toward her ultimate objective.

The heavy responsibilities carried by Miss Palmer are in the capable hands of Miss Mary McCreedy, who for the past two years has been doing research work in part-time education at Crockett while taking graduate work in the School of Education of the University of California, and Mr. Richard H. Behrens, teacher of related subjects in the Vocational Department of the Berkeley High School.

In general, Miss McCreedy is responsible for those aspects of the division which deal with part-time education, whereas Mr. Behrens is in charge of research and editorial matters.—EDWIN A. LEE.

NEW APPOINTMENTS

Melvin S. Lewis, former state director of vocational education for Idaho, and for the past three years a part-time graduate student at the University of California, during which time he was a member of the teaching staff of the Division of Vocational Education and also assistant to the Dean of the School of Education, completed all requirements for the degree of doctor of education at the end of the current summer session. Dr. Lewis left almost immediately for Indiana University, where he will occupy the chair of associate professor of education. He will be responsible for the professional program in vocational education at the University. He will have as a colleague Dr. W. W. Patty, former director of vocational education for Berkeley.

Dr. Frederick Horridge, who left the University of California upon completion of the requirements for his doctorate to become professor of vocational education at Ohio State University, has returned to California as local supervisor of vocational education at Long Beach. The southern city is the latest one to join the group which considers the problem of vocational education sufficiently important to warrant the appointment of a director charged with developing an effective program of vocational education. Under the leadership of Dr. Horridge, Long Beach should achieve an enviable record.

Professor Fred L. Griffin, who was formerly supervisor of teacher training in agriculture and who spent the past year in advanced study at Cornell University, is now in charge of the non-degree courses in agriculture at Davis. To those interested in the development of a sound program of vocational agriculture at Davis, the appointment of Professor Griffin to this important responsibility is a guarantee that the problem will receive intelligent and sympathetic treatment.—EDWIN A. LEE.

C.V.A.

By JOHN R. ALLTUCKER

President, California Vocational Association

September 1, 1927, marked the first birthday of the California Vocational Association. After a year of necessary organization during which a large amount of publicity material was distributed, and the aims and objectives of the association were explained through talks before educational gatherings and through educational publications, C. V. A. is looking forward to its second year of existence with confidence born of the splendid spirit of cooperation which has been shown by the vocational people in California.

In spite of the various difficulties which C. V. A. met during the first year, it became, within the first six months of its existence, the largest state organization of its kind affiliated with the American Vocational Association. A number of vocational groups in the state have affiliated with C. V. A., so that with the loyal cooperation of these, as well as of its regular members, a program of active service and enlarged membership is looked for.

The annual meeting which was to have been held in August was postponed to December 19 by the unanimous vote of the executive committee, in order that this meeting might coincide with that of the American Vocational Association. Monday December 19, has been set aside as "California Night." At this time C. V. A. will hold its annual meeting at which the election of officers and the consideration of all necessary business will take place. Noted speakers from California and from other states will be among the distinguished guests who will attend. The meeting will, without question, be a memorable event in the history of vocational education in California.

The fiscal year has just ended and arrangements have been made for the renewal of membership either through local organizations or through the California Vocational Association directly. Application blanks will be mailed to all secretaries and members. Membership is open to all persons interested in the field of vocational education. The annual fee is two dollars, half of which is devoted to full membership in C. V. A., and half, to the affiliated membership in A. V. A.

Membership in C. V. A. may be either direct or affiliated. Application should be made through the secretary of local vocational groups, or to Mr. R. J. Springall, secretary of C. V. A., Sacramento High School, Sacramento, California. Applications should contain name, address, the particular field of vocational work in which the applicant is interested, and the dues. In some of the larger cities local secretaries are prepared to issue memberships directly.

As we take up our school duties for another year, let us unite to strengthen our profession and promote its service by becoming members of the California Vocational Association.

The A.V.A. Convention

By ALBERT E. BULLOCK

It is seldom that Western vocational teachers have an opportunity to attend a great national convention, because such conventions are usually held in the East or Middle West—so far away that the cost of attending is prohibitive in time and money. The news that the greatest of all vocational education conventions is to be held in Los Angeles, December 17, 19, and 20, under the auspices of the American Vocational Association, is, therefore, especially welcome.

The officers of the association, under the leadership of President Edwin A. Lee in cooperation with group chairmen, have been busy for several months securing speakers of national and international reputation and arranging valuable and inspiring section programs. Arrangements will be made for the following groups: Industrial Arts, Trade and Industry, Agriculture, Commercial Education, Homemaking, Part-time, Rehabilitation, and Vocational Guidance.

Besides the program, there will be an exhibit of the latest equipment and supplies used in the various branches of vocational education. This exhibit has been supplied at an expense of several thousand dollars by manufacturers and dealers interested in the vocational education market. Last, but not least, there will be the chance to confer with other teachers engaged in the same line of work.

The Los Angeles Convention Committee is working hard to perfect a machinery which will make the great convention run smoothly and to the satisfaction of all who attend. A mere mention of the names of the various committees will give some idea of the careful plans that are being made. The committees are as follows: Registration, Entertainment for Men, Entertainment for Women, Banquet, Finance, Publicity, Meeting Places, Exhibits, and Information and Hotel Accommodation.

Many teachers will doubtless arrange with their boards of education to substitute this convention for their local institute.

Let's go!

Shall C.V.A. Yield its Leadership to Pennsylvania?

(The following is reprinted from an article entitled "Pennsylvania vs. California—Which are you supporting?" by C. E. Hedden, secretary-treasurer, Pennsylvania Vocational Association. The article appears in the October issue of the Pennsylvania Vocational Education News.)

"For the first time in the history of affiliated state societies, Pennsylvania is at the present time unable to claim first place with the largest membership. The state of California, with little more than one-third as many vocational and practical arts teachers as Pennsylvania, has at the present time a larger membership in its state association than Pennsylvania had last year and promises an enrollment this year of between 1000 and 1500 members.

"While California will probably make an unusual effort this year, since the annual Vocational Association meeting is to be held in Los Angeles, it seems a pity and certainly unnecessary that Pennsylvania, with nearly three

NEWS NOTES DISTRIBUTES APPLICATION BLANKS

In the earnest hope that they will accept the challenge of the profession, the NEWS NOTES is providing its readers with C.V.A. application blanks. Maintain C.V.A. in the lead by giving it your moral and financial support!

times as many teachers, should yield supremacy in this particular feature to California.

"Is it not worth two dollars to every vocational and practical-arts teacher in the state of Pennsylvania to feel a co-operative share in having maintained the Pennsylvania Vocational Association as the largest Vocational Association affiliated with the American Vocational Association? Will it not give us who cannot go to Los Angeles a thrill to know at least that our State responded to the roll call as the first and largest association represented at the national meeting? . . ."

Recreation Centers for Women in Industry

The question of the employment of women in industry is one of the most challenging social problems confronting welfare agencies today. Economic pressure is forcing an ever-increasing number of women into the wage-earning world. Most of them have little or no vocational training. Many have dependents. These women need help to get the best type of job possible so that they may earn their living and have opportunity for wholesome recreation during their leisure hours. An unusual experiment is under way in Oakland where the Women's Employment Agency and the Y. W. C. A. have combined forces in an effort to meet these two divergent needs.

For some time, the Women's Employment Bureau has recognized the great lack of constructive placement work for women entering industrial plants and has been gradually increasing its efforts to take care of this particular class of applicants. The staff is building up this work by making daily trips to the industrial districts where they visit factories, mills, hotels, restaurants, and stores to establish contacts, look for possible vacancies and follow up workers already placed.

While the Employment Bureau has been seeking positions for its women, the Y. W. C. A. has been trying to develop a recreation program for them. An industrial city such as Oakland offers comparatively little opportunity to women for suitable amusements, sports, or exercise in the neighborhood of their homes or work. Yet mill workers, especially, need something to offset the drudgery of their routine tasks. Since these women cannot come to the Y. W. C. A., the Y. W. C. A. is going to them and is inaugurating a recreation program for them in or near the factories where they are employed.

For this purpose it has secured the services of Miss Ruth Reynolds as industrial secretary. Miss Reynolds, a trained social worker and teacher of physical education, gives half her time to the Y. W. C. A. as recreational leader, and half her time to the Women's Employment Bureau, where she has been engaged as manager. In this dual capacity, she goes to the factories where the bureau has placed workers. Taking these women who already know her as a nucleus she starts a little recreation center. If there are tennis courts or other facilities already installed at the plants, these are utilized. If not, the nearest Y. W. C. A. branch or public school playground is used. The program shapes itself to meet the needs of each individual center. From these centers, the Y. W. C. A. hopes to build up, eventually, an organization which will take in the whole city.

Reorganization in Agricultural Supervision

Vocational-agriculture education in California has now reached a point at which all Federal and State funds set aside for reimbursement of salaries of agriculture teachers have been absorbed. The State Department of Vocational Education has, as a result, determined upon a policy of up-grading the work already in progress rather than attempting general promotional work.

In order that such a policy may be effectively carried out, five part-time assistant supervisors have been appointed to supervise the vocational-agricultural work throughout the State. Each supervisor is attached to an institution giving instruction in agricultural education in the region over which he exercises supervision. One half of the supervisor's time is given to instruction in this institution and the other half to supervision of the agricultural education departments of his region. These regional divisions of the State will become more or less self-controlled units. The regional supervisor will be responsible for the program in his region and will handle all reports. The regions will have their separate conferences, contests, and so on. The state supervisor in all cases will work with individual schools through the regional supervisor.

The Sacramento Valley region, involving all the counties of the valley north of Sacramento, will be supervised by Mr. A. G. Rinn, formerly director of the Department of Agriculture in Watsonville High School. Mr. Rinn will have his headquarters at the Chico State Teachers' College in which he will teach part of the time.

The San Joaquin section, comprising the counties of the San Joaquin Valley, will be supervised by Mr. E. W. Everett, formerly director of agriculture in the Santa Rosa High School. Mr. Everett is connected with the Fresno State Teachers' College and will enter upon his second year as a regional supervisor. The excellent results of his work last year are responsible for the extension of the regional program throughout the State.

The coast counties north of San Francisco will have as their regional supervisor Mr. Howard Chappell, who was formerly attached to the Modesto High School. Mr. Chappell will be stationed at the San Jose State Teachers' College.

Mr. R. J. Werner, formerly state supervisor of agricultural education and lately commissioner of secondary education, will supervise the coast counties south of San Francisco. Mr. Werner will be stationed at the San Jose State Teachers' College, where he heads the newly established Department of Rural Education.

The thirteen counties in the region south of the Tehachapi will be supervised by Charles Perrin, who will make Chaffey High School his headquarters.

It is expected that this reorganization of agricultural supervision will have a very valuable effect on California agriculture, since it will not only make possible the giving of far more personal attention to the development of regional programs, but will also place men of wide experience in agricultural education in centers where their influence will be of the utmost value in developing the rural life of the State.

Fourth Lillard Encampment

By HENRY M. SKIDMORE

September 5, 6, and 7 witnessed the fourth and most successful annual gathering of California agriculture students at Camp Lillard, in connection with the California State Fair at Sacramento. One hundred and ninety students of agriculture and fifty instructors from thirty high schools representing all parts of the State enjoyed three days of study, play, and recreation. Many of the schools represented in the camp school exhibited splendid project material in the various departments of the Fair. The exhibits in live stock, crops, and farm mechanics were of particular interest. Competition in all departments was spirited, and practically all schools carried home some of the prize money, trophies, medals, and ribbons, which had been generously provided by the Fair management.

Doubtless, the greatest good the boys derived from the encampment was the opportunity to study the extensive exhibits of the Fair itself. The camp was organized with this as a major objective and the study of the more important departments of the Fair formed a required part of the instruction. Certain hours were set aside for instructors to conduct their boys through such portions of the exhibits as were deemed best, while other hours were given over to the boys to browse where fancy led them.

During the first two days, two-hour periods were devoted to a systematic study of horticulture, poultry, live-stock, and farm machinery. On the morning of the third day, the boys were given an examination in these four subjects in addition to some general questions on topics treated by the various speakers who had addressed assembly periods. The examination was of the true-false and multiple-choice type which called for a minimum of writing. The results of this "ex" took the place of the judging contests of former camps and counted toward

scores for the various prizes and trophies. For the sake of convenience and greater efficiency, the boys were grouped, and, at certain intervals, led in rotation from instructor to instructor so that each boy might receive the same instruction in all subjects. The results indicate that the boys were "on the job" all the time and were making the most of their opportunities. Not the least of the benefits the boys enjoyed was the opportunity to listen to men like Governor Young, George H. Hecke, director, State Department of Agriculture, Robert Condee, president, State Agricultural Society, and Sam Greene, secretary, California Dairymen's Association.

The day was started with setting-up exercises before breakfast and the boys had access to equipment used in various athletic games. The second evening the boys had passes to the horse show, and in the afternoon of the third day they were admitted free to the grand-stand while instructors totaled scores and determined the winners in the various contests. Tents, cots, and straw ticks were furnished by the Fair management, the boys brought articles which could be more easily transported; such as, blankets, plates, knives, forks, and spoons. Meals were provided at \$2.50 a person for the three days.

No boy who had previously attended was allowed to attend this year; in this way a new group of boys has the benefit of the experience each year. The educational value of the encampment may be judged from the fact that some of the boys in attendance this year had never before ridden on a street car or in an elevator.

The camp was established four years ago with appropriate exercises and was named Camp Lillard after the first state supervisor of agricultural instruction, J. B. Lillard, now president of the Sacramento Junior College.

Vocational Chemistry in the High School

Mr. M. S. Moore, head of the department of chemistry in the Los Angeles Polytechnic High School, enjoys the distinction of being a pioneer in vocational education for chemists in the secondary school. Mr. Moore first outlined his course in the spring of 1909. Up to that time, the dominant aim of the chemistry course had been that of preparation for college, practically no provision having been made for the boy whose inclinations prompted him to take up work in chemical laboratories, drug-stores, and other allied industries, without the additional four years of higher education.

An Unsolved Training-Problem

Before giving the details of Mr. Moore's course, it is well to call attention to the training-problem which the industries mentioned above have not yet solved. To say that a man is a "chemist" is as accurate a description of his employment as to say of him that he is a "business man," without adding something about the nature and extent of his business. The universities and other advanced institutions have assumed the burden of training the generally expert and the research chemist. So far, a very

great percentage of these trained graduates have served some time at work which does not require their prolonged and thorough training. Other workers have been trained intensively to do this work without a sufficient background of general chemistry. Either class of workers represents waste, which points to the fact that these industries are in need of a new type of chemical education for their apprentices; a program of training intended for the apprentice who has a specific and fairly immediate vocational objective. The boys thus trained may become as good chemists as the graduates of the universities, but the fields in which they excel are more limited than those open to graduates of a professional course given in an institution of higher learning. For purposes of definition, the workers with the more limited training are usually referred to as chemical technicians.

Placement Record Justifies Course

During the first year of work offered to the boys preparing to become chemical technicians, Mr. Moore included one year of general inorganic chemistry, and one-half year each of qualitative and quantitative chemical analysis.

As the enrollment in the course increased and the success of the boys became demonstrable by successful placement, Mr. Moore added a one-year course in organic chemistry to meet the needs of students preparing to enter chemical work in sugar factories, oil refineries, drug-stores, or other chemical industries involving organic chemical processes.

The placement record of the students enrolled in these courses has been most satisfactory. A large number found employment in drug-stores as pharmacists after passing the State Board of Pharmacists' examination. Part of the students passed this examination without further preparation, and part, after completing a course in a college of pharmacy. Other graduates found positions in various chemical industries of which a few may be mentioned; an explosive plant, a potash recovery plant, an alcohol distillery, a soap factory, a chemical supply house, a paint factory, an analytical chemical laboratory, a motion picture laboratory, and a sugar factory.

A number of students have worked their way up through the ranks to responsible positions as chief chemists and superintendents. A few outstanding graduates include a superintendent of a chemical supply house, a chief chemist to a large paint concern, and a superintendent of an important alcohol distillery.

Enrollment in the courses offered has numbered about twenty each for the courses in qualitative and quantitative analysis, with approximately the same number for the course in organic chemistry. The total enrollment during the past school year came close to one hundred, which is about 3.5 per cent of the total enrollment of the high school.

A few of the students who have started out to become chemical technicians have found their interest in the work large enough to carry them through four years of college work. A few who had sufficient interest in the work, but not the money necessary for extended study, have made their own way by working as chemical technicians while attending college.

Mr. Moore is still a pioneer, but he has pointed the way for successful vocational chemistry in the secondary school in California.

Trade and Industry Personals

Many placements were negotiated and teaching positions filled by the Appointment Bureau of the University of California and the California Teachers' Association. The following list is not complete, but will be of interest to many in the vocational field.

Mr. E. F. Counter, who taught printing for the past year at Modesto, is now teaching at Santa Cruz in the position left vacant by Mr. Jules Chourré, who is now teaching in Tamalpais High School at Sausalito. Mr. Victor F. Johnson, who has been teaching supplemental drawing at Sacramento High School, is now teaching in the Oakland Technical High School. His place was filled by Mr. Ernest Borehart of this year's teacher-training class at Berkeley. Mr. R. C. Look is teaching automechanics at Fortuna. Mr. Harold Neil Wright, who has been teaching vocational electricity at Lick-Wilmerding School at San Francisco, is now connected with the Roosevelt High School in Oakland.

The following members of this year's teacher-training class have been placed:

<i>Name</i>	<i>Subject</i>	<i>Locality</i>
E. E. Eldridge	Automechanics	Orosi
H. C. Bellus	Related subjects	Alameda
A. H. Scherrer	Electrical	Fresno
J. L. Schumacher	Plumbing	San Jose
P. J. Thiele	Carpentry	Fresno
F. F. Cooper	Printing	Berkeley
William Cole	Woodworking	San Francisco
Thomas Cormack	Woodworking	Lodi
J. J. Hyer	Electrical	California Polytechnic, San Luis Obispo
D. B. McFarlane	Machine shop	California Polytechnic, San Luis Obispo
L. M. Stevens	Electrical	Lick-Wilmerding, San Francisco
Stanley, A. Ward	Carpentry	Alameda
F. L. Woods	Automechanics	San Rafael
C. F. Von der Mehden	Woodworking	Kelseyville
	Orchestra	
Alonzo A. Harrington	Woodworking	Oakland

The New State Commission of Vocational Education

When California in 1917 accepted the provisions and benefits of the Federal Act providing for the promotion of vocational education, the State Board of Education was named as the agent charged with the duty of carrying out the provisions of this Act within the state. The State Board of Education appointed a Commissioner of Vocational Education whose specific duty was to foster vocational education in accordance with the provisions of the Federal and State Vocational Education Acts. For the purpose of assisting the Commissioner of Vocational Education in carrying out his mission, supervisors were appointed for each of the three branches of the vocational-education program of the State; agriculture, trade and industry, and home economics.

This organization of the administration of vocational education in California has recently undergone a modification through the adoption by the State Board of Vocational Education of a resolution creating a Commission for Federal and State-aided Vocational Classes. Under the reorganization, this commission constitutes the agent delegated to carry out all the instructions and mandates of the State Board of Education according to the provisions of the Federal and State Acts.

The new Commission for Federal and State-aided Vocational Classes consists of the chief of the Division of City Secondary Schools and the four chiefs of bureaus, each representing one of the four branches of vocational education; agriculture, trades and industries, homemaking, and civilian vocational rehabilitation. The chief of the Division of City Secondary Schools is the chairman of the commission as well as the coordinating officer between the Federal Board for Vocational Education and the State Board of Vocational Education.

The members of the Commission are as follows: Nicholas Ricciardi, chief of the Division of City Secondary Schools and chairman of the Commission, Julian McPhee, chief of the Bureau of Agriculture Education, J. C. Beswick, chief of the Bureau of Trade and Industrial Education, Maude Murchie, chief of the Bureau of Homemaking Education, and Ira W. Kibby, chief of the Bureau of Civilian Vocational Rehabilitation.

Substitutes for Apprenticeship

(The following is a synopsis of a lecture given by Mr. C. A. Bennett, editor of the Industrial Education Magazine, to Mr. Johnson's teacher-training classes at the University of California at Los Angeles. The lecture has been summarized by Mrs. Helen K. Winchell, secretary to Mr. Johnson.)

The year 2200 B.C. marks the approximate date of the earliest record concerning apprentice training. This record, contained in a translation of the Babylonian Code, yields the statement, "If an artisan take a son for adoption and teach him his trade, no one may bring claim against him. If he do not teach him his trade, the father may take him back into his household."

The earliest form of apprenticeship known was thus a relationship between father and son; or, in case the boy left his father's house to become an apprentice, the relationship became that of an adopted son in the household of his adopter. The father's first obligation was to see that the boy had the benefit of learning the trade and of being initiated into its "mysteries"—today usually termed "related subjects." Additional responsibilities devolving upon the father were those of providing the boy with moral and religious training, as well as a general education in the accepted sense of the time. The father, of course, furnished food and shelter for the boy.

Another early record, which reveals the attitude of the early Jews toward handicrafts, is found in the Talmud. The statement, "He who does not teach his son some trade, prepares him to be a robber," indicates that the Jews did not take trade training lightly. Their training method suggests the modern part-time education plan, since the boy was sent to a rabbi to learn the law in the morning and spent the afternoon working with his father at his trade.

Apart from a few boys, usually the sons of professional men destined to pursue a profession, no boy received any education other than that acquired through his apprenticeship. It is therefore small wonder that, under these early conditions and those which later attended mediaeval craftsmanship, the apprenticeship method of training should be regarded as the only system of education ever attempted for the sons of mechanics—the sons of craftsmen.

This system of apprentice training changed with the times. During the Middle Ages it was subjected to the powerful influence of the guilds—organizations of masters who laid down rules regulating the relations of apprentices and masters in matters of trade training. These regulations were carefully worked out and as carefully lived up to. Covenants known as "indentures" were drawn up in duplicate and served to hold both master and apprentice to the conditions of the contract. These indentures furnish very interesting source material. Although some date back only 50 or 60 years, they still contain phrases from their early prototypes.

Such a system of apprentice training was ideal when the interests of master and apprentice were identical. That such identity of interest could not exist under all circumstances is obvious. In some cases an avaricious master would exploit his apprentice and teach him very little; in others, a well-intentioned master would rush his apprentice through the first part of the training-program in order to gain a correspondingly greater profit from the last years. Such action on the part of the master would

often tempt the apprentice to break his indenture and to sell his services to the highest bidder. Often when a boy was taken into a home as an apprentice, he married the master's daughter and became thus a member of the family.

With the invention of the power loom in England and the consequent development of the factory system during the latter half of the eighteenth century, a decline in apprentice training took place. The power loom made it possible for one man who had the skill, administrative ability, and capital, to set up looms and to gather about him relatively unskilled people to operate the looms. The success of this system of production, at present referred to as the factory system, caused mills to be built wherever water power was available and created a demand for cheap labor.

The most serious abuse of this system was the employment of orphans who were apprenticed out in droves to factory owners by the heads of orphanages. The many hardships suffered by the children, who were compelled to work in unsanitary quarters for long hours, at work far beyond their endurance, caused noted people in England to appeal to the guilds for relief. The guilds were powerless, but a law was passed to regulate and control the employment of certain types of apprentices and to make restrictions concerning the kind of treatment given them.

Another invention, made during the last quarter of the eighteenth century, affected the apprenticeship method of training more deeply than any that had gone before. At this time James Watt invented the steam engine and so made the building of power mills independent of natural water supply. From that time only labor supply had to be taken into consideration in the erection of factories. The factory owner could now place his factory wherever a group of children were willing to work for him without being indentured. He was thus no longer responsible for their keep and could work them twelve hours a day.

The next step in legislation against this abuse of the child occurred in 1844 when a law was passed making part-time-school attendance compulsory for children. This law gave rise to the "half-time" school of that period. This school had two main objectives; first, the removal of the children from the unhealthy condition of being shut up in the factories for twelve hours; second, affording the children an opportunity to acquire a certain amount of general education.

Since, as has been pointed out above, apprenticeship was a synonym for education for the sons of craftsmen and mechanics, new educational devices became necessary when the apprenticeship method fell into disuse with the introduction of the factory system. The "half-time" school made up for part of the training formerly supplied by the terms of the indenture. Other schools known as "mechanics' institutes" came into existence. These schools offered to mature workers an opportunity to study the "mysteries" of their trades; science, natural philosophy, chemistry, and other subjects were taught with special

emphasis on their relation to the various trades. To those who had not gone to school while young, these institutes offered an opportunity for elementary education.

Similar movements took place in other countries to compensate the young worker who had been disinherited educationally through the disintegration of the institution of apprenticeship.

In the United States, schools similar to those mentioned above were founded in New England, although the employment of young workers in this country was not abused to the extent that it was in Europe, since the selectmen in the towns had the power to regulate apprenticeship and to see that proper relations were maintained between master and worker.

In France the guilds remained powerful until the time of the French Revolution. As soon as every man was at liberty to earn his living at any trade which he saw fit, the standards of craftsmanship were lowered to such an extent that the government had to take steps to regulate the guilds. Since Napoleon foresaw that if France were to maintain her industrial position, she must have training schools for her workers, an admirable school system of arts and trades was established under national control and with national support. These schools were for the purpose of training skilled craftsmen and foremen.

In the year 1863 a commission was appointed in France to make a study of all apprenticeship problems. In 1865 a report was made which classified into three types the school shops then found in France: First, those training mere operators; second, those training real craftsmen; third, those training foremen.

It is significant to observe that whenever, since the time of the French Revolution, France has looked for substitutes for apprenticeship, she has turned toward the school. The French schools have not, however, been expected to furnish the nation with great multitudes of craftsmen; the factories have been considered the proper training place for these workers.

In Germany, where the power of the guilds has not diminished perceptibly until within recent years, the problem of apprenticeship substitutes assumed a somewhat different aspect. The idea of compulsory education originated in Germany, therefore the abuses found in that country were never as bad as those found in England. Early German continuation schools grew out of the Sunday schools, where the children obtained not only religious instruction, but also instruction in reading and writing.

The year 1865 marks a turning point in methods of dealing with apprentice training. Up to this time no careful analyses had been made of the trades of the mechanic arts; no effort had been made to put their content into a form suitable for instructional purposes. An analysis of sewing had been made in England, and one of drawing in Switzerland; but no careful analytical work had been done in the field of mechanic arts.

The first analysis of this kind was made at Moscow in the year 1868. In working out a program of railway promotion, the Russian government established a training school at Moscow to train mechanics as efficiently and as quickly as possible. An analysis was made to accomplish this objective. This was the first effective analysis made for the purpose of teaching shop work.

The last fifty years have witnessed an important emphasis upon the idea of analyzing a trade before teaching it. Since Dr. Harvey, of Stout Institute, said, at a meeting in Bloomington, Illinois, "What we need is an analysis of the various trades. I wish somebody would give \$40,000 to make an analysis of trades and tell us what to teach," much more than this sum has been spent on the making of analyses and highly satisfactory results have been obtained.

In concluding his lecture, Mr. Bennett expressed the following opinions: The factory is in all probability the best place in which to learn speed in production; special technique may best be learned in the shop; the "mysteries" of the trade—the related subjects—may best be learned in the school, which has gradually become a substitute for apprenticeship. This place is also the best in which to acquire the general education that everyone should have, as well as the moral training necessary to successful group life. Mr. Bennett also stated his belief that in the future, as in the past, the school will have to assume responsibility for a large part of the training formerly shouldered by the institution of apprenticeship.

Sewing Classes Popular at Crockett

Asked to explain why sewing is elected by 85 per cent of the girl students in the Crockett high school, Mrs. Alice LaBaree writes, "I think that the success of our work in the sewing department of the Crockett high school is due to the general demand for this sort of work on the part of the girls. Most of our girls are enrolled because they are under the necessity of making not only their own garments but clothes for the younger children of the family and often for their mothers as well.

"The sewing room is very attractive. Every convenience is here for their use. Moreover, they know that something definite and worthwhile will be accomplished by their efforts.

"Others (a smaller group of girls) take the work because they really like sewing for its own sake. Also they are anxious to learn to design and make clothing at less expense than the articles they could buy ready-made. They take pride in creating a presentable garment from odd bits of material or from old clothes which have been ripped, steamed, pressed, and re-styled. It is interesting to note how much thought they will give to remodeling, especially if there is need of economy in the home. In fact, often the girls are more pleased with the result of their efforts in renovating old garments than when they work with new material. Great excitement reigned when one girl took her father's wedding suit and made it over into a coat.

"We use the sewing classes as a practical laboratory for citizenship. The girls develop pride in their own accomplishments and respect for each other's problems. They are encouraged to help other pupils less fortunate than themselves. For instance, if a girl has no time in school to sew, and no one at home to sew for her, and needs help in the making of her clothes, the other girls are glad to assist her. We try to emphasize this spirit of cooperation and to make the sewing classes profitable not only from the vocational standpoint but from that of community service as well."

A Challenge to Education

HUMAN WASTE IN EDUCATION, by Anna Yeomans Reed. Century, 450 p., price \$2.50.

The author of this book has thrown down the gauntlet to education. She presents in review a series of studies of school retardation and elimination and of junior employment. The reader would feel more certain that the book was intended as a serious, critical study of the surveys reviewed if the author had not engaged so often in the game of "calling names." Her descriptions are enlivened by such phrases as "pupil exploitation," "unsophisticated leadership," "naive," "absurdity of the method of school retention," "propaganda," "unethical and unscientific methods of selling education," and "orgy of legislation."

Dr. Reed points out the human waste caused by the retention in school of the child of low mentality who is doomed for repeated failures and to loss of opportunity to seek employment. This she calls "educational exploitation." No faith is expressed in the ability of the school to be of service to the child, and Dr. Reed pins her faith on employment. She rightly points out that we have had many studies of the school side of the problem and few of the results attendant upon employment in industry. In her stimulating, but not altogether unbiased review of the studies of retardation, mentality, and employment of young workers "the Economic-Pressure Myth, the Wage-Worth-of-School-Training Myth, the Delinquency Myth, and the Physical-Degeneracy-in-Employment Myth" are laid low.

One or two significant studies, however, were not included in Dr. Reed's list, namely the findings in regard to the "arrested development" of the young worker in England as described by Margaret Phillips in "The Young Industrial Worker" (Oxford University Press) and the physical hazards of the young worker as shown in "The Health of the Working Child," Special Bulletin No. 134, New York State Department of Labor. Both present "factual evidence" on the other side of the argument.

Dr. Reed's position in regard to the continuation or part-time school is not quite clear. In the first chapter she asks, "What is the purpose of the compulsory continuation school? Is it an unrecognized, as yet unrealized, attempt not only to extend opportunity for secondary education to all, but even to force it upon them by law?" Then, in the last chapter in speaking of the 14- to 16-year-old workers she says, "constant guidance and supervision during employment induction are essential for this group and should be regarded as functions of the public school system," and again, "That it is possible for industry and public education to cooperate in the inauguration and development of educational programs, but that industry cannot be expected to carry the entire expense of instruction and supervision." She has here recommended two of the chief functions of the part-time school.

Frequent reference to high minimum requirements as to age or grade and interference of continuation-school attendance with employment of young workers suggests a failure to recognize a wider economic problem than is discussed in this book. In spite of the decrease in employment of young workers, there has been no recent under-

production in this country and several national conferences on unemployment of adult workers have been held. If, as Dr. Reed says, "The manufacturer does not need the 14- to 16-year-old youth," then several states have been spared the glutting of the market with cheap labor.

Such an economic argument is not, however, an excuse for "educational exploitation" of youth. The recent nation-wide movement to revise curricula, to set up goals other than grade attainment, and to make special provision for the mal-adjusted child are the real answers to Dr. Reed's challenge. She may be right in placing her faith in employment—employment unqualified—even though there have been no studies to measure its value. Part-time school administrators and teachers, especially, may well give Dr. Reed's arguments careful consideration and accept the challenge to show that the part-time school does enhance the educative values of employment where such values exist.

E. G. P.

Berkeley Inaugurates Cooperative Program

With the beginning of the new school year, a program of part-time cooperative education has been inaugurated in the Berkeley High School by George C. Mann, director of vocational education for Berkeley.

A number of well-qualified boys have been selected from the machine shop and placed on a week-about plan in various machine shops in Berkeley. These shops have been selected with a view to the learning opportunities which they afford their apprentices. The employed boys are under the careful supervision of Mr. Dwayne Young, head of the industrial department of the high school, and Mr. Chauncey King, instructor and coordinator in machine shop practice. Foremen at the shop also maintain close supervision of the boys.

Conducts Classes at U.S.C.

During the summer, Mr. Vierling Kersey, assistant superintendent of schools in Los Angeles, conducted two well-filled classes in education at the University of Southern California. The courses were entitled, "Organization and Administration of Vocational Education" and "School Administration and Supervision."

Committee Will Help Solve Problems

At the request of William John Cooper, state superintendent of public instruction, Superintendent Mark Keppel, president of the California Teachers' Association, recently appointed a Committee on Evening Schools, Special Day and Evening Schools, and Part-time Education. This committee will work with Superintendent Cooper's office on the solution of various problems which may arise in the divisions represented by the committee. The committee includes the following members: Walter B. Crane, Los Angeles, chairman; H. Bert Glover, Los Angeles; J. E. Hancock, San Jose; O. S. Hubbard, Fresno; and George O. Lockwood, Glendale.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE
STATE BOARD OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 3. Bulletin No. 2. An Analysis of Department Store Occupations for Juniors. December, 1920.
- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921. (A revision of Leaflet No. 2.)
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921. (Out of print.)
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 9. Bulletin No. 7. The Work of Juniors in the Telegraph Service. April, 1922.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 11. Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922.
- No. 12. Bulletin No. 10. Third Annual Report of the Director of Part-time Education. Stockton, California. October, 1922. (Out of print.)
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.

TRADE AND INDUSTRIAL SERIES

- No. 1. Bulletin No. 12. Analysis of the House Carpenter's Trade. March, 1923. Price, 40 cents.
- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price 40 cents. (Out of print.)
- No. 3. Bulletin No. 15. Analysis of the Plasterer's Trade. April, 1924. (Out of print.)
- No. 4. Bulletin No. 16. Analysis of the Automechanic's Trade. June, 1925. Price 60 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

AGRICULTURE EDUCATION SERIES

- No. 1. Bulletin No. 8. Job Analysis Applied to the Teaching of Vocational Agriculture. May, 1922. (Out of print.)
- No. 2. Bulletin No. 11. Farm Mechanics for California Schools. November, 1922. (Out of print.)
- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 1. Bulletin No. 1. Syllabus of an Introductory Course on Part-time Education. January, 1920. (Out of print.)
- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price 50 cents.

NEWS NOTES

- Part-time News Notes. v. I, Nos. 1-8. November, 1920-May, 1922. (Out of print.)
- Vocational Education News Notes, v. II, Nos. 1-7, September, 1922-May, 1924. (Nos. 1, 3, and 5 out of print.)
- v. III, Nos. 1-9, October, 1924-June, 1926 (No. 7 out of print.)
- v. IV, No. 1, November, 1926. v. IV, No. 2, April, 1927. v. IV, No. 3, June, 1927.

New Publications

Haller, George F.: *Selection and Purchase of Equipment for Trade and Industrial Classes.* (University of California. Division of Vocational Education. Bulletin no. 22.)

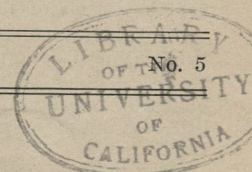
While director of the vocational department of the John Swett Union High School, Crockett, California, Mr. George F. Haller was confronted with the problem of selecting and purchasing the necessary equipment for the vocational department of the high school then under construction. Many lists of equipment were available, but all were of doubtful value on account of the prejudices, arising from different causes, of their authors. "Selection and Purchase of Equipment for Trade and Industrial Classes" is a record of Mr. Haller's problem and its solution, and offers to others confronted with the same problem a method of procedure which will aid in making efficient and unbiased selection and purchase of shop equipment.

Hubener, Virginia R.: *A Digest of Laws for Working Boys and Girls.* (University of California. Division of Vocational Education. Leaflet no. 6.)

In the foreword to Miss Hubener's study "A Digest of Laws for Working Boys and Girls," Professor Edwin A. Lee states, "It is well for the boys and girls of the state to know the regulations which affect them in regard to education and employment. It was with this idea in mind that Miss Hubener of the San Francisco Part-time High School, who has been dealing with young workers for a number of years, prepared this material as a study. . . . It is not intended to present all the laws affecting minors nor to give all the details of the laws mentioned, but to answer as clearly as possible the questions which minors may ask concerning their privileges and obligations in respect to schooling and employment."

Behrens, Richard H.: *An Analytical Study of the Duties of the Chemical-Laboratory Technician.* (University of California. Division of Vocational Education. Bulletin no. 21.)

In "An Analytical Study of the Duties of the Chemical-Laboratory Technician," Mr. Behrens draws a sharp distinction between the professional chemist and the chemical-laboratory technician. His study reveals that the expert chemical technician is not an under-developed professional chemist, but a worker in his own right in a more limited field of chemistry. The bulletin is a discussion of the chemical-laboratory technician, his status, his employment opportunities, and the possible inclusion of his training in secondary vocational education. Analytical tables point out certain tendencies in emphasis which such a training-program might profitably follow.



A. V. A. Convention Makes History

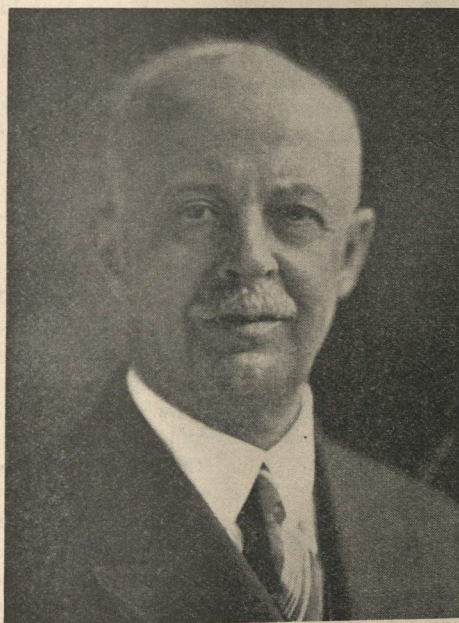
Every year all those who have formally pledged themselves to promote the cause of vocational education meet to renew their pledge, to take stock of themselves, to study the ever-widening field demanding their energies, and to see the pattern of the work as a whole: the occasion is the annual convention of the American Vocational Association. The convention of 1927 has passed into history and the memory of its brilliant setting makes each and all of us debtors to Los Angeles for her lavish and gracious hospitality.

The beauty of the setting of the convention and the perfection of its arrangements were exceeded only by the vigor of what has been properly called the "vocational leaven." For ten years the vocational leaven has been at work, and on the threshold of a new decade it promises activity which will make itself felt in every field of education to an even greater degree than before.

In view of what happened at the convention, this statement from the *New Republic*, December 28, 1927, is significant: "Modern education is, to be sure, gradually concentrating on the problem of individual liberation, but, quite properly, it is preoccupied with the problems of childhood and youth, and it is not paying much attention as yet to the problem of adult education." If one goes to the root of the matter, one begins to wonder by what logic the education of children should take precedence over that of adults; whether the shortest way to educate children is not to educate adults; and whether it does much good to educate children if they are to live with adults who may not, just because they are adults, keep pace with a changing world through that continuous process of human liberation which is education. One wonders whether the lack of education does not move in a vicious circle, and whether it matters much at what point this evil is attacked. The members of A. V. A. are wondering no longer; they who "constitute an outstanding group of liberals in education" have taken up the challenge, formulated, through their Committee on Adult Education

and its Subcommittee, an exhaustive report on the problem of adult education, and have, at the suggestion of the Subcommittee, adopted a creed to the rhythm of which the A. V. A. will carry its ideals into the field of adult education, in which it is already a veteran in the specific field of vocational education.

The leadership of A. V. A. has passed from the hands of President Lee into those of President Cooley; and vocational education in California has been quickened by the convention, and by the privilege to pledge itself to the creed of the progressive educator, read at the convention by the patriarch in the movement for vocational education, Charles A. Prosser.



R. L. COOLEY,

President of the American Vocational Association.

The Creed of the Reactionary

1. I believe that education is primarily for the benefit of a limited group of superior individuals.
2. I believe that trained leadership is the life saver of democracy.
3. I believe that the main purpose of education is to select and train scholars for leadership.
4. I believe that all the necessary resources of society should primarily be applied to the training of leaders.
5. I believe that education is primarily preparation for the enjoyment of life.
6. I believe that education is the possession of information and culture.
7. I believe that there is one form of education best adapted for all people who are worth educating.
8. I believe that those unable to meet satisfactory standards in this form of education should be allowed to go their way without prejudice.

9. I believe that the educator is responsible for the efficient teaching of approved subjects but not for the results of his work so far as individuals are concerned.

10. I believe in conformity to the ideas of experienced educational leaders and in loyalty to time honored educational institutions.

The Creed of the Progressive

1. I believe that education is primarily for the social well being of this democracy and not for individual benefit.
2. I believe that a trained citizenry guided by trained and capable leaders is the life saver of democracy.

3. I believe that the main purpose of education in a democracy is to prepare all its people for the duties and responsibilities of citizenship.

4. I believe that the ordinary man needs educational service as much as the "superior man" and that he is just as much entitled to it.

5. I believe that education is primarily preparation for the duties of life, that it is life.

6. I believe that education is primarily training for thinking and doing (things) in some socially useful way.

7. I believe that there are many forms and kinds of education for training the interests and abilities of many different kinds of people—all of whom are worth educating.

8. I believe that every normal man can and should be educated so that he can work for himself and for society.

9. I believe that the educator is responsible both for the individual and the social results of his work.

10. I believe that education must be constantly adapted to the changing demands of life and should, therefore, never be dominated by tradition or by the mere voice of authority.

C. V. A. Holds Annual Meeting in Los Angeles

The second annual meeting of the California Vocational Association was held in Los Angeles, December 19, in connection with the annual convention of the American Vocational Association. President John R. Alltucker presided at the meeting; Dr. C. A. Prosser, director of Dunwoody Institute, and Nicholas Ricciardi, chief of the Division of City Secondary Schools of California, addressed the members of C. V. A. who had gathered from all parts of California.

President Alltucker reviewed the history of C. V. A. and pointed out that the association is facing a critical period of its existence. Organized in August, 1926, C. V. A. has at present achieved a membership of one thousand, which is more than twice that reached by the nearest competitive state organization. President Alltucker urged continuous and active support of the association by all those interested in vocational education in California.

Mr. Ricciardi pointed out a very specific way in which C. V. A. members might contribute to the progress of vocational education in California. He told of the revision which is being undertaken in the field of educational requirements in the high school. Graduation requirements are at present in a period of transition and the University is welcoming their revision. As a program of work for the coming year, Mr. Ricciardi proposed to members of C. V. A. the definition of vocational majors: putting vocational subjects on an equal footing with academic subjects.

Dr. Prosser delivered the principal address of the occasion. In his delightfully informal style he touched in the course of a short time upon almost every major problem in vocational education. Dr. Prosser pointed out that vocational education is rapidly shaking off the chains of an inferiority complex when it faces general education; that it has the stewardship for the plain, ordinary man; and that of all types of education it has the subject-matter most suited to putting girls and boys through thinking experiences. Dr. Prosser reminded the assembled teachers of the difference between peddling information

and training to think. Reflecting upon the progress of vocational education during the last ten years, he significantly quoted: "The stone which the builders rejected has become the head of the column."

At the business meeting, which followed the general meeting, it was decided that the present constitution is inadequate for the needs of the association. Two committees, one from the North and one from the South, were appointed to work out a revision of the constitution within the next three months.

Resolutions were read at the meeting commending the retiring officers for the excellent work done by them during the past year. John R. Alltucker, organizer and retiring president of the association, was given a special vote of thanks for his untiring efforts in behalf of the C. V. A.

The following officers were elected to carry on the work of the association during the coming year:

President,
Ralph W. Heywood,
Jefferson High School, Los Angeles.

Vice-Presidents:
William G. Morrison,
Marysville High School, Marysville.

Cora Erwin,
San Jose High School, San Jose.

James S. Mullen,
Manual Arts High School, Los Angeles.

R. E. Gilbert,
Oakland High School, Oakland.
Secretary-Treasurer,

Fred A. Wright,
John Dewey Vocational School, Long Beach.

Superintendent Cooper Proposes Codification of School Laws

At the A. V. A. Convention at Los Angeles, Superintendent Cooper made an important announcement concerning the proposed codification of the California school laws which is to be undertaken in the office of the state superintendent of public instruction. The preamble of this code is to be of special significance since it is to define a new attitude toward education—an attitude which makes education less a penal function assumed by the state toward the young and more a responsibility undertaken by a wise and benevolent parent for the protection of the child.

In an address delivered at one of the meetings of the recent A. V. A. Convention at Los Angeles, the newly elected President of A. V. A., R. L. Cooley, pointed out the indignity to which the young are subjected by being denied any self-determination whatsoever. No state which desires to make a success of its educational program ought to say to its youngsters leaving school: "You thought you were free, but we will show you; we have fixed up a short-pants place for you; once a week we are going to bring you in to work off your stint." Although, as President Cooley pointed out, "the dogs must be kept away from the first rung of the ladder," a formal restatement of our philosophy is needed. The preamble to the proposed codification of the California school laws will give more adequate expression to the philosophy of the State in educational matters.

The Place of Part-time Education in the Secondary School System

By NICHOLAS RICCIARDI,
Chief, Division of City Secondary Schools.

Every community must choose between paying the cost of training young people to become efficient workers or paying the much higher cost of having them inefficient workers. Our national bill for crime is ten billion dollars annually. Our annual loss from inefficient work is four billions. Our annual expenditure for all types of education, on the other hand, is but two billion dollars. The wise community, such as Huntington Park, chooses, therefore, to train efficient workers. It costs less to do that than to have inefficient workers, and is thus a more profitable investment of public money.

Part-time School: A Community Responsibility

In the training of efficient workers, each community has the responsibility of making specific provision for the part-time school. It may be said, in fact, that one of the vital responsibilities of every community is to make clear the place of the part-time school in the program of public education. The place of the part-time school may be briefly defined in this way: the part-time high school is the community coordinating agency which directs and supervises the activity of employed minors who are not high-school graduates so that they may be effectively adjusted to their environment as occupationally successful persons.

Occupational Success

The question: "When is a person occupationally successful?" is now pertinent. A person is considered occupationally successful when he combines the following three qualifications: first, skill; second, technical knowledge; and third, social understanding. Skill means the actual doing of the work. A person, for instance, employed in a battery service station may know how to test the battery and service it without having the related technical knowledge of his work. Such a person is a routine worker. When he acquires the related technical knowledge, he goes out of the class of routine workers for he then knows *why* he does his work, as well as *how* to do it. Skill may be called the *how* of the job, and technical knowledge the *why* of the job. Skill may be effectively developed on the job, but technical knowledge can be given most effectively in school. By social understanding, which is an invariable requisite of the efficient worker, is meant, "job wisdom or those qualities of character which go deeper than skill and technical knowledge." Its importance is brought out in the comment of a certain employer who said: "We need young workers of character. If they don't know enough about their work we can help them to make up the deficiency on the job, but if they are lacking in character we can do very little with them." Another employer, in speaking of the salary paid to a very efficient secretary, made this remark: "We pay him a thousand dollars a year for what he knows and two thousand dollars a year more for what he is."

Occupational Failure

Why do men lose their jobs? Recently the Bureau of Vocational Guidance of Harvard University made a study

of the causes for discharge. The conclusion of that study was stated by Dr. J. M. Brewer, director Bureau of Vocational Guidance, Graduate School of Education, Harvard University, as follows:

"All causes that could possibly be classified as skill and technical knowledge together total slightly over one-third, while the social understanding causes constitute the controlling reasons in about five-eighths of the cases." In other words, on an average, more than sixty per cent of workers in various occupations are discharged because they are lacking in social understanding, i.e., those qualities which make for stability of character, while only slightly over one-third are discharged because they are lacking in skill or technical knowledge.

Place of the Part-time School

The place of the part-time school, therefore, is a very vital one in the program of public education. Its task is to control and supervise the activity of minors under eighteen years of age, who go to work before graduation, and to help them to form right health habits, right job habits, right spare-time habits and right character habits, so that by growing into capable workers, intelligent citizens, and socially efficient persons they may become a part of the community's best assets.

Right habits are most effectively developed through experience, through action, through doing; not merely by talking about what should be done. They are not developed by preaching to young people. Young people can be helped to grow and acquire right habits by putting them into real situations where they can actually experience facts and realize their significance, not by pouring information into them, or by having them memorize facts. Youth must be brought into contact with reality and kept in contact with reality. Under the new and changing conditions of modern life, the most positive way to keep youth in contact with reality is through work experiences.

A New School for New Conditions

Recently Henry Ford, in announcing his new car, made this statement: "We realize that conditions in this country have so greatly changed in the last few years that further refinement in motor-car construction is desirable. So we have built a new car. To put it simply, we have built a new and different Ford to meet new and different conditions." If it is necessary to build "a new and different Ford to meet new and different conditions" it is equally essential to build a new and different program of public education to meet new and different conditions. In the development of an up-to-date program of public education, the part-time school must be given its place. The part-time school is a new type of school; it is charged with the responsibility of adjusting minors to their environment by coordinating the boy's or the girl's employment experience with school instruction. This coordination, including guidance, placement, and follow-up, is helping to produce more capable workers, more intelligent citizens, and more socially efficient human beings.

A Forward Look in Agricultural Education

By HENRY M. SKIDMORE,
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(The article which follows is a synopsis of an address, delivered in connection with the recent A. V. A. Convention at Los Angeles, by Mr. H. M. Skidmore before a meeting of vocational educators in agriculture.)

Looking into the future of a movement with the purpose of determining its probable course is uncertain business; yet it is a responsibility which devolves upon all those interested in maintaining the movement charted in the right general direction. Too often the prophet substitutes wishful thinking for judgment; yet, one may, without turning prophet, be justified in an attempt to analyze present trends, and to project these trends by means of the lantern of interpretation.

The effort which for a generation or more, well-meaning and worthy persons have spent on "back-to-the-farm" movements has probably been misplaced, since it is inevitable that the flow of population should be directed toward the industrial centers. The numbers that migrate do not create a problem if the quality of the elements which stay in the country is such that they may achieve an efficient type of farming, a higher level of living on the farm, and a standard of rural citizenship commensurate with the needs of our democracy. Some economists contend that the low standard of living in the country is due to too many people on the farms, with consequent overproduction and unremunerative prices. As the marginal farms and farmers are reduced in number, those remaining will produce a product of better quality, and prices and standard of living will automatically rise. An effective program of vocational education should aid greatly in the solution of this problem. Such a program should draw more and more upon the most promising farm-boys and should make it impossible for our departments of agriculture to become dumping grounds for misfits. There may not be too many farmers, but there are certainly too few *successful farmers*. As departments of agriculture turn out more boys better fitted for farming, they will serve to raise the general standards of rural citizenship.

The young farm student studies economics with a motive: he is brought to see that farming is no longer a self-contained calling; that it demands contacts and competition with men in other lines of business, and that these demands *necessitate business training*. Cooperative endeavor is stressed and the interplay of agriculture and industry assumes a commanding position in the more advanced courses. In places where young farmers may avail themselves of such training-programs, there will be little need for "back-to-the-farm" movements.

Federal Aid Likely to Continue

Because of the determined fight waged by certain factions, at the time the so-called maternity bill was under consideration, against all Government-aid of whatsoever character to states, it is interesting to speculate upon the probable future status of Federal aid for agricultural education. Since little has been published on the subject, a number of people were consulted. Opinions expressed by the Secretary of Agriculture, several deans of land-

grant colleges, directors of extension services, and workers in the field of agricultural education, may be summarized as follows:

(1) There seems to be no tendency, either actual or probable, to abandon any of the fields in which the Government is at present engaged in lending assistance to states. This statement applies equally to support of land-grant colleges with their several activities, and to vocational education as it is now being administered under the Smith-Hughes Act.

(2) Indications of a tightening-up on future appropriations for these purposes for a few years to come, at least until the war debt has been liquidated, are discernible. Agriculture is generally regarded as the only probable exception to this program of retrenchment. "By reason of the nature and the hazards of agriculture, it must always be an industry favored by Government," says Dean Mann, of Cornell University. The possibility of increased funds for education, either general or vocational, seems rather slight.

The future of the Federal Board for Vocational Education is closely associated with the question of Government-aid to states. It is the consensus of opinion that the Federal Board for Vocational Education will continue as it is now organized until the time when a department of education is formed with a secretary in the Cabinet, when the Board may either become primarily an advisory body, or may disappear altogether. Eventually the organization for vocational education will doubtless become a bureau in the department and will continue to function in much the same way as it functions at present; such a plan was indeed comprehended in Mr. Harding's proposed reorganization scheme.

Vocational Education and General Education

The question has been raised as to whether vocational education will continue as a distinct entity in the scheme of public education, or whether general education will in the future take on the essential features of the vocational program and gradually absorb the latter. Although such absorption was prophecied by a member of the first Board for Vocational Education, consensus of opinion yields a decidedly negative answer today. In many places vocational education has been slow to operate on a strictly vocational basis on account of being administered by academically minded men; yet, on the whole, the program of general education has been vastly influenced by the objectives, attitudes, methods of teaching, and general organization of vocational education; and it may be safely predicted that the whole field of education will continue to improve because of its vocational leaven.

Statements are often made that the pursuit of vocational courses in high school does not prepare the student successfully to cope with work of college grade. Recent

studies indicate that this charge has not the foundation in fact usually accorded it. A study made under the direction of Dr. William Proctor, of Stanford University, entitled "The Relation of Subjects Taken in High School to Success in College" (Journal of Educational Research, February, 1927) shows that subjects taken in high school have much less bearing on success in college than was formerly thought. While college preparation is not of primary concern in vocational education in agriculture, studies such as this will tend to strengthen the cause of agricultural education in the secondary school and to shift the emphasis from the general to the vocational courses.

Work Has Gone Beyond Promotional Stage

The steady and rather gradual growth in numbers of all-day departments of agriculture and their registrations, shown in the report for 1926 of the Federal Board for Vocational Education, may be expected to decline, since this year, 1927-1928, sees no increase in Federal funds, and, in most cases, none in state funds. Whatever loss occurs in numbers of departments will, however, be more than compensated by their increased effectiveness, to maintain which states may be counted on for funds up to a point where the most pressing needs can be met. Departments which now exist mainly because state and Federal funds are available will have to give way to new applicants with more legitimate claims. Refinements will occur all along the line; new departments will be established only upon the basis of careful surveys; and those already in existence will receive more attention from the state office than was possible when the work was still in its promotional stage.

Since more effectively organized departments receiving more helpful supervision will make for fuller classes, there seems to be no reason to expect any decrease in enrollments in all-day departments. Prosser estimates that by 1934-1935, about 600,000 persons will be enrolled in all kinds of agricultural classes. A straight line of increase, such as this figure contemplates, will not square with facts but measures roughly what may be expected. While the growth of all-day enrollment has been rather gradual and constant, the very sharp increase in evening-school enrollment is remarkable. An enrollment of 19,000 reported to the Federal Board for Vocational Education for the year 1925-1926 shows a remarkable growth when compared with the 1300 enrolled in 1922.

Agricultural Evening School Has Great Future

Undoubtedly, the evening school is the biggest and the most important uncultivated field lying before vocational education in agriculture today. It was natural that having first attended to that large group of farm boys brought together by the machinery of school organization, the school should reach out to those beyond the pale of day school. The day school deals with apprentices; the evening school with journeymen. Boys of high-school age are too young to grasp the full significance of vocational education; they are not dead-sure that they will want to farm. With a lukewarm attitude toward his vocation, the boy will not take sufficient training to carry him beyond the first stages of his responsibility; he will, when confronted with man-sized problems, be

left to fall back upon the expensive "pick-up" method, as Allen terms it. At this time he will feel the need for and will welcome specific instruction. When the adult farmer today, who has not enjoyed the preliminary training which his son is getting, shows a surprising willingness to think through his problems in conference, how much greater eagerness may be expected from the boy when he in turn stands in his father's shoes! Any program that neglects this field is bound to be incomplete and unsatisfactory inasmuch as it will train the comparatively few for their first responsibilities, while neglecting the many in their more real need.

Some workers in vocational education in agriculture seem to be afraid to drive into the field of evening-school instruction on account of encroaching upon the services of the land-grant colleges. With all agencies working at full capacity, there will still be much to do in rural betterment. As a matter of fact, the two services do not conflict; they complement each other. Where friction exists it is either born of jealousy and ignorance, or it is the result of clashing personalities. In the direction of evening classes for adult farmers, the decade ahead promises the greatest activity and accomplishment yet witnessed in the field of vocational education in agriculture. These classes will probably become a more or less fixed part of the local program, functioning as centers of business-in-farming activities, and out of them may grow cooperative organizations of various sorts.

Part-time Classes Bound to Decrease

Lying between the all-day school and evening classes is the field of part-time classes, the future of which seems fairly impenetrable. Doubtless, this field will experience great growth, but just what turn this growth will take is hard to determine. In states having a distinct winter season during which farming activities are at a standstill for a considerable time, there is ample opportunity for intensive, short-unit courses of several weeks duration. The work in these courses will be more concrete both in subject-matter and method than that offered by the all-day classes, and it will extend further into the scientific and general field than does the work given in the evening classes. That there are large numbers of boys out of school, and of such ages as to constitute a problem of magnitude, is evident. A juggling of census figures—never too dependable—indicates that about two million farm boys are out of school. Many of these are, of course, not available for instruction, since they are of foreign extraction and of the farm population, although not farm boys. The mining towns of the mountainous regions supply a large number of the unavailables; and itinerant workers of the Southwest and boys from the scattered communities of the West, not sufficiently populous to justify the effort, go to swell the ranks. In spite of adverse factors, many communities will find a rare opportunity for bringing together for concrete instruction groups of these unemployed youths. Part-time workers seem to be most enthusiastic about the possibilities in this field. Yet, as more and more youths are reached by the all-day program and more adults by the evening classes, the demand for part-time classes should decrease in proportion.

New Methods Must Replace Old Ones

Since the establishment of new departments is approaching completion and the need for promotion has decreased, it would be fitting if improvement in the methods of selecting, organizing, and teaching subject-matter should become the center of emphasis and development. The principle of basing teaching upon local agriculture has been almost universally accepted, enterprise analysis has made fine gains, and present-day teaching methods have begun to differentiate themselves markedly from those inherited from general education whereby assigned pages of the text were droned out in "recitations." A great distance, however, remains to be covered before perfection is even approached in this respect. Those who have been supervising teachers know how "spotted" practice is, and those engaged in teacher-training know how difficult is the job of developing proper method with new men in residence classes, and that of upgrading men in the field by overcoming the slants gained by them through years of being taught according to academic standards. A most encouraging sign of progress is the desire on the part of men with some years of experience to overhaul their entire method of approach, to substitute new methods for old. Such instances are full of promise for the next decade.

Teachers Must Be Trained on the Job

The outlook for teacher-training is auspicious. Perhaps the most significant trend in this field is a tendency to place less faith in pre-training and to shift the emphasis to upgrading on the job. Belief that purely educational courses will give prospective teachers adequate equipment for the work ahead of them is fast waning. These courses deal mainly with material quite outside the field in which the men will be working as teachers of agriculture, and serve primarily to set the student thinking in terms of educational procedure. This is desirable and necessary, but far from sufficient. Only those courses which deal directly with the specific problems of the situations in which these students will soon find themselves will bear any considerable carry-over, which in all probability will be in proportion to the degree to which these problems have been considered in their natural settings. If these observations are valid, it follows that fewer courses in education will be required in pre-employment training; the so-called practice-teaching periods will be enlarged, and the weight of training shifted from residence courses to itinerant teacher-training. That California is committed to such a policy may be seen from the fact that the period of practice teaching is being extended in this state; the initial period of six weeks consisting of little more than observation in selected high schools was first extended to a full semester of observation and directed teaching; and more recently to a full year of observation and part-time teaching upon completion of the merest minimum of preparatory courses. Effective training is achieved only when the trainee faces and recognizes real problems: when the trainee has been inducted into his first real job, his training has just begun. It is at this point that too many teacher-training departments stop, either by choice or through force of circumstances; contact with the trainee is weakened or lost entirely, and his future progress, whatever it may be, is through trial and error: the so-called "pick-up" method.

Knowledge of Technical Subject-Matter Essential

A very real problem in teacher-training lies in getting young men with more nearly adequate training and experience in technical subject-matter. If the problem exists, and it surely does, vigorous work on its solution may be confidently expected. Just what improvements are to be made and how they shall be accomplished cannot be readily set down; excellent beginnings have been made and suggestive procedures worked out. Experiences of several institutions with faculty conferences under competent leadership, and publications such as Federal Board Bulletin No. 90, by T. H. Eaton, and the report of the A. V. A. Committee last year on farm mechanics, point the way to better things in the future.

Future Looks Promising

Doubtless, many other trends may be discerned; some of greater significance than those enumerated, but these suffice to indicate that the next decade will see accomplishments in vocational education in agriculture fully as satisfying as those of the decade just closed. Vocational education in agriculture is passing from the pioneering stage into a stage of substantial development: we make this transition with a feeling of satisfaction for what has been accomplished and with full confidence that still greater things lie ahead.

Trade Extension in Sacramento

By FRANK C. VINCENT

Director of Vocational Education, Sacramento

The man who feels that he is trained for his job and is doing a creditable piece of work gets a joy out of his daily work which may not be experienced by the man, who, whether he admits it or not, knows that he is always falling short of the standards set by better workmen. The pleasure which a man gets out of his social life is apt to be in proportion to the pleasure which he derives from his work: the man who is adjusted to his work reflects his adjustment in his other activities; the man who is not in harmony with his daily work is more apt to be at odds with the world. The performance of the trained man who takes keen pleasure in doing a good job easily surpasses that of the man who feels no joy in his work; when the latter is laid off, the former stays on the job because he has accomplished more and is worth more. Employers and employees alike are well aware of the important relation which training bears to efficiency in the making of a craftsman.

Sacramento is indeed fortunate in the amicable relations which exist between representatives of the crafts and those of the schools whose joint efforts have secured for this city an effective program of trade extension providing opportunities for tradesmen to improve their skill by taking work in the Vocational Department of the Sacramento High School.

A trade-extension class is one which extends the training of the student in his specific trade. The student must be employed at his trade at the time he is taking trade-extension training; a student who is working at a particular trade and wishes to receive training for another is not eligible for admission to trade-extension classes, but will be admitted to the trade-preparatory classes con-

ducted as day-school classes at the High School for its vocational students. Since the membership of the trade-extension class is thus limited to persons actually engaged in the particular trade for which training is given, its work becomes so highly technical that it is justifiable only for the group for which it was intended.

With the exception of paper hanging, taught in a six-room house under actual industrial conditions on Saturday mornings, all classes are conducted two evenings a week in the vocational shops of the Senior High School. Instruction is given in the following subjects: electricity, machine-shop practice, printing, sheet-metal work, painting and paper hanging, and plumbing. Apprentices and journeymen who are employed in these trades may avail themselves of the opportunity to do advanced work.

In order to prove the demand for trade-extension training, advisory committees were organized for each of the crafts mentioned above. These committees, composed of employers, employees, and the Director of Vocational Education, worked out the details of the organization of the classes and presented petitions to the Board of Education, requesting that such classes be conducted under school supervision.

All apprentices employed in the shops of the Western Pacific Railroad in Sacramento are enrolled in trade-extension classes. This group includes machinists, boiler makers, electricians, and car builders. The boiler makers

enroll with the sheet-metal workers, and the car builders with the wood workers.

All apprentices affiliated with the American Federation of Labor and sponsored by the local unions for instruction in the crafts are required to attend these classes as a part of their apprenticeship training. Compulsion, however, is scarcely necessary, since the men usually become so interested that they are anxious to attend.

The needs of the class determine very largely the subjects taught and the methods employed in teaching. Some classes have as students men who have worked at the trade for many years following the completion of their apprenticeship.

The teachers employed to teach the trades must be superior craftsmen who have worked at responsible industrial jobs for many years. In most instances teachers in the day vocational school are selected to teach the trade-extension classes; when such teachers are not available, the advisory committee selects the instructor among local workmen. A journeyman must have many fine qualities before he may be recommended to the position of instructor of his fellow-workmen. The men selected to teach these classes are given supervision and assistance by the school department in order to bring the program of trade-extension service to a degree of maximum efficiency.

A Cooperative Community Poultry School in Middletown

By CARL BECK

Instructor in Agriculture, Middletown Union High School.

November 28, 1927, marked the opening of a cooperative community poultry school in the Middletown district. Middletown is a small town in the southern part of Lake County; its principal farming enterprises are horticultural in nature, although some livestock is raised: sheep, hogs, and poultry. The Middletown district is particularly suited to the production of poultry, and it is therefore gratifying that at present there is a decided movement toward stimulating that industry.

The Department of Agriculture of the Middletown Union High School, in cooperation with the principal of the high school, the farm center, and the farm advisor, planned a ten-day cooperative poultry school to assist those interested in advancing poultry husbandry in the Middletown district. The school was conducted according to the methods advocated for Smith-Hughes adult education in agriculture.

In order that the work might correlate closely with the interests of the students, questionnaires were sent out designed to bring out the particular improved practice in which each member was interested. The questionnaires met with good response and the work was outlined on the basis of the information obtained in this way.

Each evening some person who had been successful in the particular field chosen for discussion was placed in charge of the meeting. The meetings were informal, and since those present volunteered their experiences generously, many valuable practices were brought out. At the close of each night's work, the agriculture teacher summarized the points which had been brought out during the night's discussion.

The first unit of instruction was devoted to turkey production and took up five evenings. The jobs were as follows: getting started in the turkey business, brooding young turkeys, feeding turkeys, controlling diseases of turkeys, and marketing turkeys. Attendance at these meetings averaged 25.4 a meeting; the highest number attending any one meeting being 29, and the lowest 21. The meetings were attended by 46 different people of whom 12 came every night; 1 to four meetings, 9 to three meetings, 14 to two meetings, and 10 to only one meeting. Thus 22 persons attended three or more meetings. As a culmination to the turkey meetings, a turkey association was organized and meetings are to be continued throughout the year.

The last five meetings were taken up with the problems of the chicken raisers. The job units were: culling for egg production, housing chickens, caring for baby chicks, feeding for egg production, and marketing eggs. The attendance figures follow: out of 35 people who attended, 5 attended every meeting, 4 four meetings, and 5 five meetings. Thus a total of 12 attended three or more meetings; the average attendance being 13.6.

Attendance figures for the entire school were as follows:

Total number attending	62
Average attendance	19.5
Number attending three or more meetings	27.0

The meetings began November 28 and closed December 9. They were held on week nights only and lasted from 7:30 to 9:00. No special entertainment was provided, and class discussion was confined strictly to the problems of turkey and chicken raisers.

Cooperative Education in Stockton

By F. R. LOVE

Director of Vocational Education, Stockton.

A year ago this January, Stockton entered upon one of its most interesting phases of vocational education, when, through an agreement with the Western Harvester Company, the Stockton High School organized a course in foundry practice on a cooperative basis. Since the foundry department felt the need of well-trained mechanics and was willing to cooperate in every way possible in the training of the apprentices, it was chosen as the department most suitable for launching the work.

The school had the good fortune of having in its vocational department a man who for ten years had worked in the plant of the Western Harvester Company and who during this time had been closely associated with the foundry work in all its different phases. The plant management, the foundry superintendent, and the foreman, were unanimous in approving the appointment of this man as apprentice director.

Boys Work on Production Basis

In order to set up an effective training-program, the apprentice director worked in the plant from three o'clock until five during five days of the week, and all day Saturday. He consulted all the people concerned with the result that a workable training-program had been set up before any boy was placed in the plant. The company was so well pleased with this program that they decided to extend the plan of cooperative apprentice training throughout the plant. In order to make possible the contemplated extension of the training-program, the school gave the plant the full-time service of the apprentice director, who now works in the plant eight hours a day during eleven months of the year. At present the training-program takes in apprentices in the machine shop, the drafting room, and the millwright shop; the sheet-metal and pattern shops are expected to be included in the near future.

The apprentice training-program of the Western Harvester Company is closely tied up with the Stockton High School. The foremen who give the boys their shop training are all highly skilled in their work and have been granted special secondary vocational-arts-type credentials for teaching foundry practice. The related work is given by an experienced high-school teacher; and the attendance of the apprentices is reported to the attendance clerk of the high school.

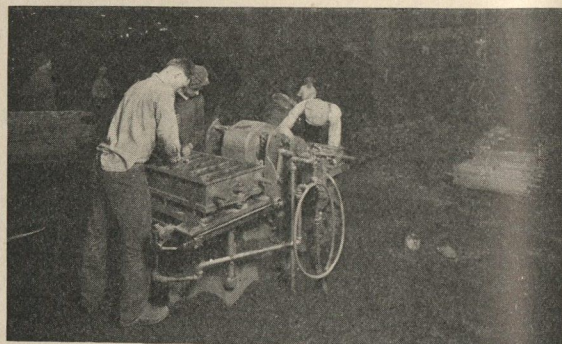
The course covers a period of approximately four years, at the end of which the successful apprentices receive a diploma of apprenticeship signed by a representative of the Western Harvester Company and of the Stockton Board of Education. The apprentices are paid for time put in at the plant, whether in the shop or in the shop classroom; overtime is paid with time-and-a-half.

The major part of the training takes place in the foundry proper, where the boys work on a production basis. Nothing is done merely for practice; all apprentice work is intended for use. Training takes place in the

shop under shop conditions, and when the boys have finished their course, they will not only be skilled foundry men, but will also be accustomed to shop conditions.

Shop Program Given Careful Consideration

The shop program, the details of which are given below, is the result of careful consideration on the part of the foundry superintendent, the foremen, and the director of apprentices, of the abilities and skills required by the all-round foundry man. In order to secure flexibility the program is divided into a series of units, each of which received a time allotment according to its importance. The units do not necessarily come in the order in which they are presented here; two requirements must, however, be observed: each unit must be given in the order of its learning difficulty, and each apprentice must cover the training included in each unit.



Boys Work on a Production Basis.

The shop training is divided into three main parts; molding in the foundry, core-room work, and miscellaneous foundry work. The one hundred weeks spent on the units of the molding group are distributed as follows: light roll over jolt molding machine, seventeen weeks; heavy roll over jolt molding machine, nine weeks; squeezer molding machine, thirteen weeks; bench molding, twenty-six weeks; light and heavy floor molding, seventy-eight weeks. The thirty-nine weeks spent on core-room work are allotted as follows: helping in core-room, four weeks; simple core work, nine weeks; complicated core work, thirteen weeks; assembling, pasting, and inspecting cores, both light and heavy, thirteen weeks.

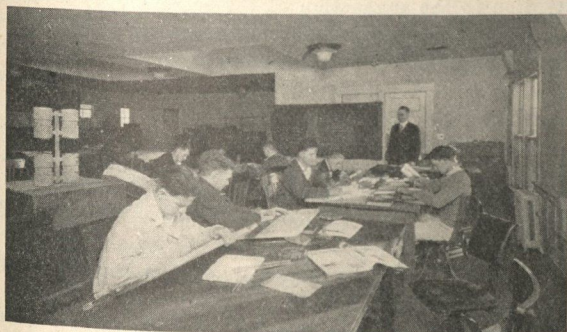
The training involved in the miscellaneous group of units includes nine weeks of cupola practice. During this time the apprentice learns to patch the cupola and to lay the bottom, to weigh a charge of coke and iron, and to put it into the cupola properly. Nine weeks spent in the pattern shop come under the miscellaneous heading also, and are intended to give the apprentice an opportunity for acquiring a more wholesome respect for pattern equipment in general. Four weeks of inspecting castings serve more fully to acquaint the learner with the numerous causes of defective castings. Four weeks in the office

of the plant complete the shop program and serve to familiarize the apprentice with the office routine followed in ordinary foundry practice.

Related Work Covers Wide Field

Most of the related work is done in a class-room in the plant. This room would reflect credit on any public school; it is well lighted, heated, and ventilated, and has an abundance of floor space; it is sufficiently away from the noise of the shops, yet near enough so that classes may be taken into the shops for practical demonstrations during class periods.

The related work, in general, involves shop mathematics, science, English, history, civics, mechanical drawing and blue-print reading, and shop safety and hygiene. The mathematics consists of a review of the fundamentals of arithmetic with special emphasis on mensuration. With this background, the apprentices are given the opportunity to estimate the weight of castings from blue prints and from the casting itself; these estimates are checked by actual weights. The boys are also taught to estimate shrinkage and draft for pattern work, to figure a mixture of iron to satisfy the requirements of particular types of castings, and to mix and melt the various ingredients entering into a brass or bronze casting. The boys take actual cupola charging reports and estimate the melting loss, the percentage of good and bad castings, the melting ratio of coke to iron, and the percentage of the melt returned as gates, spurs, shot iron, and bottom drop. They are given experience with pay-roll problems, and with the fundamentals of cost; the cost of melted iron is computed at the spout; the cost of molding, the cost of cores, and that of factory overhead, are all taken into account. All these problems represent merely a few of the mathematical phases of typical foundry problems which are considered in this course.



Related Subjects Instruction.

The related science covers a wide field. The boys study the relationship existing between the chemical elements in a casting; the percentage of loss or gain experienced by these elements during melting; the effect of the temperature of melted iron on the strength and quality of the casting; and the core mixtures to be used for certain types of cores. The apprentices familiarize themselves with the shrinkage of cast iron as related to the design of a casting; the composition of molding and core sands; the principles involved in tempering and renewing molding sands as well as those involved in gating patterns; the structure, physical properties, and chemical analysis

of coke suitable for melting iron. These problems do not constitute an outline of the course but merely represent a sampling of its most typical phases.

The related drawing consists largely of shop sketching, with considerable emphasis on the reading of blue prints. This emphasis is designed to give the apprentice the ability to estimate from the print the volume and weight of a casting, and to interpret the print in terms of the pattern so that he may determine the method of molding and gating, and the type of core boxes required in the production of the casting.

The history content deals largely with the industrial history of America; the rise of quantity production, specialization, and standardization of product, may be cited as items illustrating the method of approach. The economic phases of the problem are not neglected; marketing, banking systems, wage systems, taxation, and so forth, all receive due attention. In addition, time is given to the history of metals, the story of metal working through the ages, and the contribution of metals to the development of present-day civilization.

The related civics takes on the character of community civics. Police and fire-protection systems are studied by means of visits to these city departments and of talks given before the classes by officers of these organizations. The apprentices attend meetings of the city council and make trips to the offices of the city and county tax collectors for the purpose of acquainting themselves with the local method of assessing and taxing property. The system of voting is observed and practiced, and courts are visited while interesting cases are in the process of being tried. The effort is continually made in related civics to so train the boy that he will become a useful as well as an intelligent citizen.

The apprentices study English with a view toward reading it with comprehension and writing it with clarity; the ability to read trade literature, to write trade articles, as well as convincing letters, and to express ideas concisely, is a major objective of the work.

The study of safety and hygiene is promoted through the medium of a safety club organized by the apprentices, who elect their own president, vice-president, secretary-treasurer, and safety committee. The club studies shop safety and submits to the central safety committee of the plant, at the end of each month, a report containing suggestions concerning working conditions of the factory. Matters of safety and hygiene are taken up each week at the club meetings, which take place during the latter half-hour of the class period.

The shop schoolroom is being furnished with a technical library which is open to the apprentices during the noon hours and whenever they have any time off at the plant. The apprentices are made to feel that this room belongs to them; they may go there either to study, to play games for recreation, or to confer with the apprentice supervisor.

Course of Study Continually Revised

The account given above is at best a very brief outline of the course of study for the training of foundry apprentices, and is by no means to be considered as complete. The very nature of the work continually reveals new problems and opportunities which necessitate a con-

stant revision of the course of study in order that it may keep pace with the progress of industry.

The success of the program as a whole has been due to the fine spirit of cooperation shown by all concerned in the enterprise. The plant officials, the foreman, the Stockton Board of Education, and the Superintendent of Schools, all heartily endorse this practical method of training boys. In the future may more public schools join hands with industry in this common task of training young men to become useful citizens by training them to become efficient producers. The task is great, but the opportunities are abundant.

The Organization of Trade-Extension Evening Classes

By GEORGE C. MANN

Director of Vocational Education, Berkeley.

In expanding its program of vocational education, California has, for the first time, this year officially recognized the evening trade-extension program. Evening schools giving instruction in general subjects have been developed to a very high degree of effectiveness; yet this development of the general-subjects program in the evening high school makes it all the more necessary that careful study be given the organization of trade-extension classes, since the two types of classes differ widely both in the objectives of the school and the motives of its students. In any organization program of trade-extension evening classes three factors of major importance must be considered: (1) The selection of students. (2) The selection and training of teachers. (3) The type and length of the course.

Enrollment Must Be Limited

The enrollment of students in trade-extension classes must be limited to those who are already engaged in the trade or occupation in which instruction is given; consequently, in order to be efficient, any system of recruiting students must make a direct appeal to this special class. The newspaper, billboard, and poster campaign, used by the evening high schools to recruit students are of doubtful value as far as the trade classes are concerned.

Experience proves that those administrators who are getting the best results in the field of evening trade-extension work have first determined what industries and occupations offered the best field for training and have planned their courses accordingly. The following may be cited as a typical example of organization work in evening trade-extension. The organizer, after consulting with different industrial establishments, unions, and other interested organizations, obtained permission to put up notices in plants, secured mailing lists, and sent out letters to all those who would be likely to benefit by the specific training offered; pamphlets describing the different courses were enclosed in the letters. By means of personal contacts and correspondence it was often possible to secure the direct cooperation of an organization. The value of working directly with an organization may be seen from the following letters:

Part-time Periodicals

San Francisco Part-time High School is issuing a new eight-page paper, "Wave Lengths," which is receiving many favorable comments.

The "Metropolitan Mirror," published by the Metropolitan High School of Los Angeles, received first prize in a competition with forty-two high school newspapers in the Southern California High School Press Association.

"Part-time Topics," published by the Sacramento Part-time High School is now making its appearance in an attractive new cover.

"Dear Mr. Thornton:

"There has been considerable demand here for a course in Steel Treating. I believe that we could reach the interested people to the best advantage if we would stress the fact that we wish to cooperate directly with the American Society for Steel Treating.

"At the suggestion of Mr. Roy Wise, a member of your society, I am writing to ask if you will send me the names and addresses of your members here, so that I may acquaint them with the class and also with the fact that the class is to be conducted as a part of the program of the American Society for Steel Treating."

The reply to this letter gave the names and added:

"I suggest that in an effort to increase the roll of the course, you send a letter to these superintendents, whose employees might be attracted to such a course. I am also writing them."

Letters were written to these superintendents, calling attention to the suggestion of the secretary of the society and asking that they encourage attendance and otherwise help in building up the enrollment.

The following is typical of the replies received from the superintendents:

"Acting upon your suggestion, I am doing everything I can to encourage men who might be benefited, to attend these classes. I will do what I can to get the names of the men to you as early as possible to help you in your organization work."

As a result of this cooperative effort the classes were entirely successful.

In addition to the specific correspondence, general announcements were sent out to those engaged in all the leading industries and occupations of the city, as well as to students who had been enrolled in certain trade classes during the past two years. Special articles in newspapers were not used to any great extent, but publicity in some of the trade journals was used to great advantage. Four nights were given to registration before the opening of school and all classes had a good enrollment on the first night.

Teacher Must Have Holding Power

Getting the right students is only a good beginning; the instructor must be selected with great care. In one large evening trade school sixty teachers who started

with a good enrollment did not have a student after five weeks. The school was reorganized and with sixty different teachers the enrollment was maintained to the end of the term. The first sixty teachers had had considerable teaching experience, but no industrial experience; the last sixty instructors were men who were engaged in industrial occupations at the time and who were anxious to learn the teaching trade also. The instructor must know his subject first-hand and must have teaching ability and holding power. He must feel personal responsibility and pride in maintaining the interest of his class. The beginning trade teacher should have the help of a qualified teacher trainer who can assist him at such times when the teacher is free to work with him.

Courses Must Be Short and Specific

Mistakes have often been made in covering generally such large fields as electricity, steel treating, mathematics, drawing, and auto mechanics, by scheduling long courses in them. Many a student has embarked upon such a long course, taken it until he became tired, and then dropped it. It is important that the course be short and that it be specific: instead of starting a course in electricity, it is better to offer a specific number of lessons in "Installations of Motors and Controllers," "Repair of Small Electrical Accessories," or any specified unit that will appeal directly to an interested group. If the interest of the student is to be maintained he must know that he is going to get something definite within a definite time limit. Experience has shown that he will follow one unit after another until the "night-school habit" has been established.

Evening Trade-Extension Justifies Itself

The value of the evening trade-extension class to the development of the vocational program can hardly be overestimated. It is not only a type of training which functions immediately and justifies itself completely; yet does still more by serving as an aid in missionary work. Young as it is in California, the trade-extension class has already brought about the organization of apprentice programs and of cooperative part-time programs and has established many other valuable contacts with industry. The short-unit extension class with properly selected students and a properly selected teacher is the logical beginning of a larger and more efficient program of vocational education.

Endowment Funds Helps Needy Students

During the past winter a \$2,000 endowment fund was presented to the Metropolitan High School by the Ladies Benevolent Society of Los Angeles. The society was one of the original charitable institutions of southern California and the names on the roster of this society included ones of long historical record in California. In recent years the work of this association has been absorbed by the Community Chest. When the society was disbanded the remaining funds were distributed to various organizations. The gift to the Metropolitan High School will be used as the nucleus of an endowment fund for needy and deserving students.

Summer Conferences to be Held

A series of intensive conferences are to be held during the summer session at the University of California, both at Berkeley and at Los Angeles, for the purpose of bringing together for an exchange of ideas workers in the field of cooperative education. These conferences should appeal, not only to students in regular summer-session attendance, but to the large number of teachers and administrators throughout the state who feel that they cannot afford a six-weeks attendance at summer session to become acquainted with the problems of this latest development in vocational education. The conferences are an innovation in the training program of the State and much is being expected of them because of the wide experience of those who will attend. Many have already expressed interest in the proposed conferences and are planning their vacations to include a week or more at either Berkeley or Los Angeles.

The conferences at Berkeley will be held during the first three weeks of the summer session, and those at Los Angeles during the last three weeks. The first week will be devoted to conferences dealing with problems of organization and administration of cooperative education of a commercial and trade and industrial nature in small and large communities. The second week will be devoted to a study of the problems underlying the organization, administration, and teaching of evening trade-extension classes. Vocational guidance and part-time education will be discussed during the third week.

The conferences will be held during the afternoons and evenings of each week from Monday to Thursday inclusive. A well-known leader in the field chosen for discussion will start the afternoon session by a general lecture, which will be followed by open discussion; after the discussion the meeting will break up into smaller groups dealing with such subjects as may be of special interest to those present.

The conferences are being so planned that those who attend may have an opportunity to pool their experiences and to derive a great amount of practical benefit from the meetings. About the first of May a pamphlet describing the conferences in detail will be available for distribution and may be secured from either D. H. Biery, 121 Haviland Hall, University of California, Berkeley; or, Benjamin W. Johnson, 855 North Vermont Avenue, Los Angeles.

New State Bulletin

The Need for Terminal Courses in the Junior College, by Nicholas Ricciardi. (California. State Department of Education. Division of City Secondary Schools. Bulletin no. C-6.)

A paper on "The Need for Terminal Courses in the Junior College," by Nicholas Ricciardi, chief of the Division of City Secondary Schools, is now available in pamphlet form. The paper was first presented and discussed by Mr. Ricciardi at a meeting of the Education Committee of the Commonwealth Club of San Francisco, November 9, 1927, and subsequently published in the California Quarterly of Secondary Education (January, 1928). Requests for this pamphlet should be addressed to the State Department of Education, Sacramento, California.

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Trade and Industrial Education Agriculture Education

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MISS PALMER IS NEW VICE-PRESIDENT OF A. V. A.

At its recent convention in Los Angeles, the American Vocational Association chose to honor Miss Emily G. Palmer by electing her vice-president for part-time education. Miss Palmer's election is of particular interest to News Notes readers, who recognize in their editor a pioneer in part-time education in California and a warm champion of all vocational education. Her friends in California feel that the honor is well placed and extend their congratulations to Miss Palmer at Columbia University, where she is doing research work in the field of part-time education.

MR. BIERY RECEIVES UNIVERSITY APPOINTMENT

Donald Biery, who until recently held the position of coordinator in the Part-time High School in Berkeley, has been appointed teacher-trainer in trade-extension work in the Division of Vocational Education. In addition to his work in the Division, Mr. Biery will serve as coordinator in the Oakland Public Schools. Mr. Biery brings to his new work a varied and intimate knowledge of the problems of trade education. A graduate of the University of California, he served as director of part-time education for Vallejo previous to his appointment to the Berkeley position which he leaves to take up teacher-training work in the trade-extension field.

ROBERT W. HAMBROOK APPOINTED REGIONAL AGENT FOR THE WEST

Robert W. Hambrook, formerly instructor of machine-shop practice and coordinator of cooperative and part-time classes in the John C. Fremont High School of Los Angeles, has been appointed regional agent for trade and industrial education for the Pacific States Region. E. E. Erierson says of him in the Industrial Education Magazine for December, 1927, "Mr. Hambrook has the kind of background that will enable him to serve both schools and industry. He served apprenticeship in the machinist's trade in England and worked at the trade both in England and in this country . . . As an educator Mr. Hambrook has had a number of years of teaching experience . . . The people of the Pacific States Region will find Mr. Hambrook both willing and able to offer practical suggestions and solutions of their problems."

NEW PRINCIPAL FOR SAN FRANCISCO PART-TIME HIGH SCHOOL

Harry G. Hansell, who has been serving as acting principal of the San Francisco Part-time High School since the opening of school last August, has now been formally appointed principal. Mr. Hansell is a graduate of the University of California and a member of Phi Delta Kappa, the national educational fraternity. He has been interested in educational work for many years, the last three of which have been spent in part-time work. Starting in the part-time high school as a teacher of history and civics, he was next appointed as attendance registrar, then as vice-principal. In his short term as principal, he has introduced many innovations especially in the line of extra-curricular activities, and placement work. His many friends wish him the best of success in his new position.

Summer Session Strong in Vocational Education

The Division of Vocational Education of the University of California at Berkeley and at Los Angeles offers a summer-session program which will induce many students and teachers to spend their vacations in professional advancement. Many Californians eminent in their various fields are scheduled to give courses and several visiting instructors are joining the summer-session faculty this year. The program is printed in full.

SUMMER-SESSION STAFF AT BERKELEY

RICHARD H. BEHRENS, A.B., Acting Supervisor of Research and Service Center, Division of Vocational Education.

JOHN G. KIRK, M.A., Director of Commercial Education, Philadelphia City Schools.

JULIAN A. MCPHEE, B.S., Chief of the Bureau of Agricultural Education, State of California.

BENJAMIN ELISHA MALLARY, A.B., Supervisor of Classes for Training Teachers of Trade and Industrial Subjects, San Francisco Bay Region; Lecturer in Education.

GEORGE CARLISLE MANN, M.A., Lecturer in Education; Director of Vocational Education, Berkeley City Schools.

GEORGE EDMUND MYERS, Ph.D., Professor of Vocational Education and Guidance, University of Michigan.

NICHOLAS RICCIARDI, M.A., Chief, Division of City Secondary Schools, California.

HENRY M. SKIDMORE, M.S., Lecturer in Education; Supervisor of classes for the Training of Agricultural Teachers.

LYNN E. STOCKWELL, M.A., Director of Vocational Education, Fresno Public Schools; Director of Industrial Education Department, State Teachers College, Fresno.

COURSES IN BERKELEY

Vocational Education, Vocational Guidance, Part-time Education

S160. Vocational Education. Mr. MANN

A general course in vocational education. A descriptive survey of the history, scope, aims and purposes of vocational education and certain outstanding current problems. 2 units.

M Tu W Th F, 9.

S164. Vocational Guidance. Professor MYERS

For vocational counselors in high schools, teachers, and principals of junior and senior high schools, and others interested in the problem of the guidance of youth. Origin, philosophy and present practice in vocational guidance, and important problems now demanding solution. Admission to this course on consultation with instructor. 2 units.

M Tu W Th F, 11.

167c. Cooperative Vocational Education. Mr. RICCIARDI

Origin, objectives, need, and present practice in cooperative education. Selection of students, selection and qualification of teachers and coordinators, type of organization, characteristics of suitable training programs, and important problems requiring solution to determine the place of cooperative education in the secondary school. 2 units.

M Tu W Th F, 8.

167s. Supervision of Vocational Education. Mr. MANN

Function of the various phases of supervision in relation to the achievement of the objectives of the supervision of vocational education. Prerequisite: Education 160, or equivalent. 2 units.

M Tu W Th F, 11.

S260A. Vocational Education: Seminar. Professor MYERS

Admission on consultation with the instructor. 2 units.

Tu Th, 4-6.

S162. Part-time Education.

Mr. RICCIARDI

Various factors contributing to school mortality and the necessity for part-time education, the type of organization and the instruction suited to the needs of various groups found in the part-time schools, and the value of placement, guidance, and coordination activities. Organization and activities of part-time schools in this country and abroad, and their evaluation in the light of the California situation. Prerequisite: junior standing. 2 units.

M Tu W Th F, 10.

Agriculture Teacher-Training Courses

161A. Principles of Analysis and Curriculum Construction in Agriculture. Mr. SKIDMORE

Development of technique in analysis of farm enterprises as a basis for curriculum construction in agriculture of secondary grade. 2 units.

M Tu W Th F, 10.

300. Problems of the Agriculture Teacher.

Mr. SKIDMORE, Mr. MCPHEE

An advanced course for agriculture teachers in service. The teacher's annual program of work serves as the core of the course, the development of which provides opportunity for discussion of major problems. 2 units.

M Tu W Th F, 8.

Commercial Courses

161c. Curriculum Construction for Secondary Commercial Education. Mr. KIRK

Problems of curriculum construction as they relate to the selection of material for instruction in vocational commercial courses and the organization of such material into suitable units of instruction. Admission on consultation with instructor. 2 units.

M Tu W Th F, 10.

S165. Principles of Commercial Education. Mr. KIRK

For those who plan to make a study of the organization, administration, and supervision of commercial education in four-year high schools, junior and senior high schools, evening schools, and part-time high schools. 2 units.

M Tu W Th F, 8.

Trade and Industrial Teacher-Training Courses

361. Occupational Analysis and Curriculum Construction.

Mr. STOCKWELL

Analysis and classification of the trade knowledge and experience which the worker possesses, methods of teaching, and demonstration teaching. No credit.

M Tu W Th F, 9-11.

362. Technique of Vocational Instruction. Mr. STOCKWELL

Outline of instructional and administrative problems involved in the actual teaching of a trade; related problems, and suggested solutions. No credit.

M Tu W Th F, 11.

364. Theory and Administration of Vocational Education.

Mr. MALLARY

A brief study of the origin of the movement for vocational education in this country; the interpretation of federal and state legislation affecting vocational education; the problems involved in the organization of day, part-time, and evening classes; existing types of vocational courses; equipment, etc. No credit.

M Tu W Th F, 8.

365. Problems of Trade Technical Instruction.

Mr. BEHRENS

Related material inherent in the trades presented, in terms of science, mathematics, and drawing; how to use this related material as a means to more effective teaching. No credit.

M Tu W Th F, 9-11.

366. Part-time, Cooperative, and Trade Extension Education.

Students required to take this course will register in 167c during the Summer Session of 1928.

367. Civic and Employment Relations. Mr. MALLARY
For applied subjects teachers. The attitude of potential workers toward citizenship and industrial relations. No credit.
M Tu W Th F, 11.

SUMMER-SESSION STAFF AT LOS ANGELES

- ALBERT ERNEST BULLOCK, M.A., Supervisor of Commercial Education, Los Angeles City High School District.
HOWARD ARTHUR CAMPION, A.B., Principal of Frank Wiggins Trade School, Los Angeles.
FREDERICK HORRIDGE, Ph.D., Director of Vocational Education, Long Beach Public Schools.
BENJAMIN W. JOHNSON, Lecturer in Education and Assistant Director, Division of Vocational Education, University of California at Los Angeles; Supervisor of Classes for Training Teachers of Trade and Industrial Subjects (Los Angeles).
EDWIN AUGUSTUS LEE, Ph.D., Professor of Education; Director of the Division of Vocational Education.
LEWIS ADAMS MAVERICK, Ed.D., Lecturer in Education and Recorder, University of California at Los Angeles.
DEWITT S. MORGAN, A.M., Assistant Principal and Head of Department of Social Studies, Arsenal Technical Schools, Indianapolis.
CLAUDE E. NIHART, B.E., Supervisor of Industrial Arts in Junior and Senior High Schools, Los Angeles.
LESLIE G. STIER, A.M., Assistant Director of Vocational Education, Los Angeles City School.
ARTHUR G. WADELICH, Ph.B., Vice-Principal, Frank Wiggins Trade School, Los Angeles.

COURSES IN LOS ANGELES

Vocational Education, Vocational Guidance, Part-time Education

- S160. Vocational Education. General Course. Professor LEE
A survey of the history, scope, aims, and purposes of vocational education and certain outstanding current problems. 2 units.
M Tu W Th F, 11.
- 161A. Industrial Arts. Mr. NIHART
The objectives of industrial arts education, particularly as they relate to junior and senior high schools; discussions concerning ways and means of realizing these objectives. 2 units.
M Tu W Th F, 10.
- S164. Vocational Guidance. Dr. MAVERICK
Designed to meet the needs of vocational counselors in high schools, teachers and principals of junior and senior high schools, and others interested in the problem of the guidance of youth. A fundamental course dealing with the origin, the philosophy, and present practice in vocational guidance, and the important problems now demanding solution. Consent of the instructor is required for registration in the course. 2 units.
M Tu W Th F, 8.
- 167s. Supervision of Vocational Education. Dr. HORRIDGE
Functions of the various phases of supervision in relation to the achievement of the objectives of the supervision of vocational education. Prerequisite: Education 160, or equivalent. 2 units.
M Tu W Th F, 9.
- S260A. Vocational Education: Seminar. Professor LEE
For graduate students whose major interest is in vocational education, and who are writing, or preparing to write theses in that field, or in closely related topics. Admission on consultation with instructor. 2 units.
Tu Th, 2-4.

- S162. Part-time Education. Mr. CAMPION
A study of various factors leading to school mortality and the necessity for part-time education, the type of organization and instruction suited to the needs of various groups, and the value of placement, guidance, and coordination activities. Organization and activities of part-time schools in this country and abroad, and an evaluation of them in the light of the California situation. Prerequisite, when taken for credit: junior standing. 2 units.
M Tu W Th F, 10.

Commercial Education

- S165. Principles of Commercial Education. Mr. BULLOCK
This course is planned for those who want to make a careful study of the organization, administration, and supervision of commercial education in four-year high schools, junior and senior high schools, evening schools, and part-time schools. 2 units.
M Tu W Th F, 10.
- S318. Methods of Teaching Shorthand and Typewriting. Mr. BULLOCK
The principles of psychology underlying drill and motor control, and a brief review of interest, attention, habit formation, and association. Training of teachers of shorthand to use modern principles of pedagogy in their work and to make a study of difficulties encountered in learning to typewrite in order that scientific methods may be applied in imparting instruction. A study of motor psychology in its bearing upon typewriting for the purpose of formulating methods of instruction, and methods of plotting the students' practice curves, classifying errors, and keeping daily typewriting records. Demonstration teaching. 2 units.
M Tu W Th F, 9.

Trade and Industrial Teacher-Training Courses

361. Occupational Analysis and Curriculum Construction. Mr. JOHNSON, Mr. WADELICH
Analysis and classification of the trade knowledge and experience which the worker possesses, methods of teaching, and demonstration teaching. (No credit.)
M Tu W Th F, 8-10. Two sections.
362. Technique of Vocational Instruction. Mr. JOHNSON, Mr. WADELICH
Outline of instructional and administrative problems involved in the actual teaching of a trade; related problems, and suggested solutions. (No credit.)
M Tu W Th F, 10. Two sections.
364. Theory and Administration of Vocational Education. Mr. STIER
A brief study of the movement for vocational education in this country with emphasis on the interpretation of federal and state legislation; problems involved in the organization of day, part-time, and evening classes; existing types of vocational courses; equipment, etc. (No credit.)
M Tu W Th F, 11.
365. Problems of Trade Technical Instruction. Dr. HORRIDGE
Related material inherent in the trades presented in terms of science, mathematics, and drawing; how to use this related material as a means to more effective teaching. (No credit.)
M Tu W Th F, 10-12.
366. Part-time, Cooperative, and Trade Extension Education. Mr. STIER
A study of the problems incident to the organization and administration of the part-time, cooperative, and trade extension phases of a vocational program. The purpose and content of the short-unit course, advisory committee organization, apprenticeship programs, and plant training. (No credit.)
M Tu W Th F, 12.

367. Civic and Employment Relations. Mr. MORGAN
Of value to applied subjects teachers in creating a sound and fundamental attitude of mind toward citizenship and industrial relations on the part of potential workers. (No credit.)
M Tu W Th F, 9.

Foods: Meal-Planning Unit

By KATHLEEN MONTGOMERY*

I. Objectives:

1. To learn to select proper seasonal foods.
2. To learn to combine foods in relation to health.
3. To learn to combine foods in relation to cost.
4. To instruct the homemaker in providing her family with food which will maintain them in a state of health and well-being.

II. Factors on which realization of the above objectives depend:

1. What food supply is available?
2. How much money can be spent?
3. What foods are needed for the right nourishment of the family?
4. What do they like?
5. How long will it take to prepare the foods selected?

III. Typical menus:

Breakfast.

Fruit, fresh, dried, canned, or fresh stewed.
Milk, or cocoa made with milk for the children.
Milk, cocoa, tea, or coffee for adults. Milk on cereal for all the family.
Cereal, preferably whole, for all the family (use no sugar on cereal).
Bread, toast, or muffins (whole grain), and butter.
If a heartier meal is needed, it may be desirable to add eggs, bacon, or other fat meats and potatoes, adapting the method of cooking to the children.

Luncheon, or supper.

An egg, cheese, or milk dish.
Succulent vegetable or salad.
Bread and butter (whole grain).
Milk for children.
Sweets in moderation. Only light desserts such as fruit, simple puddings, and cookies should be served at supper. The meal may be made more elaborate, if desired, but should always partake of simplicity.

Dinner.

Meat, or fowl, or an egg, or cheese dish. Dried beans may be used if milk or eggs are not provided in the meal.
Potatoes, unless dried beans, macaroni or rice are used.
Second vegetable. Two vegetables (not potatoes) should be used with dried beans, macaroni or rice. (Fresh vegetables.)
Bread and butter (whole grain bread).
Salad may be served in addition to the meal or in the place of dessert. Sweets in moderation. Light desserts such as plain fruit, puddings, gelatins, soufflés and whips, or heavy pudding. (Heavy desserts not advocated, especially cake or pie.)
If all the milk elements that a person requires have not been used, add soup or an appetiser (such as a fruit cocktail or grapefruit), oysters in some form or a canapé. Elaborate meals not recommended for daily use.

Formal, full-course dinner. (Customary, but detrimental to health.)

- | | |
|--------------|------------------------------------|
| 1. Appetiser | 6. Salad |
| 2. Soup | 7. Dessert |
| 3. Fish | 8. Crackers and cheese with coffee |
| 4. Roast | 9. Nuts and raisins |
| 5. Game. | 10. Fruits |

IV. Facts every homemaker should know:

The food problem of an individual begins with his ancestors, who pass on their tendencies toward strength or weakness to those that follow. Strong tendencies may be maintained and weak tendencies may be thwarted by following the rules of instruction in the careful selection of a well-balanced diet.

Balanced diet.—The term "balanced diet" occurs so often in the current magazines, that every homemaker washes to be sure she knows just what it means. Briefly, it means that every day some food from each one of the six following groups is eaten:

1. Milk: For children $\frac{3}{4}$ to 1 quart daily; for adults, 1 pint daily.
2. Vegetables: Potatoes once daily; fresh vegetables other than potatoes twice daily.
3. Greens: One or more servings weekly, included in the vegetable allowance.
4. Fruits: Fresh, canned or dried, two servings daily; preferably fresh fruits, or canned tomatoes (one serving daily included in the fruit allowance).
5. Cereals: Whole cereal bread, usually; whole cereal breakfast food, usually.
6. Water: One and one-half quarts daily. (This includes in addition to plain water, the liquid in milk, tea, coffee, soups, or any beverages.)

The above groups may be modified or substituted to suit one's individual idiosyncrasies. For instance, meat, egg, and cheese may be substituted for milk or a little of each. No clever homemaker will ever serve the same foods cooked in the same way day after day, for she knows that variety of food and variety in the method of cooking are necessary to get the family to eat in sufficient amounts. Every homemaker wishes the family to eat certain foods because they are good for them, but she does not say so. She cooks and serves that food so attractively that they try it and like it. A meal should be planned to meet the needs of the youngest and the weakest members of the family. It is easier to adapt a child's diet to an adult, than it is to adapt an adult's diet to a child.

One of the important points to remember about meal planning is the cooking of the kind of food that the family likes—the food that will do them the most good. Remember that, although many people seem alike, all are really different, and each individual differs more or less in his requirement of food. The old saying that, "one man's food is another man's poison" still holds true. The mother must find out the foods which best agree with and nourish her children. The individual must select his foods both from a standpoint of nourishment and compatibility. The simplest and most effective method for the homemaker to follow is to determine, through experimentation, just which foods are adequate for the body needs and then to modify these foods by attractive preparation and serving.

Types of food.—The human body is a machine, demanding three requisites for its upkeep. The homemaker must know enough about foods to see that her family has

* Unit No. 45, Homemaking Department, Metropolitan High School, Los Angeles. This unit is one of the 125 instruction units worked out in the field of homemaking by Miss Montgomery and her associates. It is published practically in full, not only because of the excellent handling of the subject matter, but also because of the great need for typical instruction units in this field.

fuel, building, and regulating foods. The appetite is a fairly good guide to tell how much food to eat, but it does not tell you how to select it.

The body needs fuel in order to keep it running and to keep it warm. Too little fuel keeps the body thin and "run down." Too much fuel clogs the body and makes it grow fat. If one wishes to grow fat he must increase his fuel; if one wishes to grow thin, he must decrease his fuel. Foods rich in starch, sugar, fat, and protein supply fuel to the body.

The human machine needs building material to build it and to maintain it and to keep it in repair. The four most important building materials are: protein, calcium, phosphorus, and iron. Poor protein, or too little protein, makes poor muscles. Too much protein clogs the body. Too little calcium and phosphorus makes poor bones and teeth. Too little iron makes the body pale and anemic.

Protein (complete protein), or those supplying all the amino acids necessary to build body protein: milk, eggs, meat, poultry, fish, cheese, some legumes (at least soy beans and peanuts).

Protein (incomplete proteins), or those lacking one or more of the amino acids necessary to build body tissues; dried beans, peas, lentils, and cereals.

Calcium: milk, cheese, egg yolks, fruits and vegetables, especially green-leaf vegetables (spinach, lettuce, and cabbage), cereals when whole grain is used.

Iron: green vegetables (spinach, lettuce), dried fruits (raisins, dates, and figs), cereals, eggs, meat (comes mainly from the haemoglobin).*

The body needs regulating substances to keep its machinery regulated and running smoothly; to release the energy provided by fuel; and to put the building materials in place. Some of the regulating substances are: fresh fruits, vegetables, the outer layers of cereals, grains, and the drinking of plenty of water.

Vitamins are necessary to make the body grow; to give it an appetite; to build up its resistance; to protect it against disease; and to make normal teeth and bones. Lack of vitamins causes slow growth, poor bones, poor teeth, poor appetite, and poor digestion. Some vitamin foods are: apples, raspberries, grapes, nearly all green vegetables (leaves and stems), string beans, green peas, nuts, whole cereals, milk, and eggs.

Bad food habits.—Keep in mind that the following habits are detrimental to good nutrition.

1. Tea or coffee for children.
2. Over two cups of tea or coffee or both for adults daily.
3. Going without breakfast. (Unless found beneficial by experiment.)
4. Sweets between meals.
5. Meat at every meal or ordinarily more than once per day.

The time element.—Every family should be informed of the fact that there is a cost of time in preparation of food just as there is a cost of money. They must not expect dishes that are expensive in time too often; and they must show some appreciation of those dishes when they do appear on the table. The experienced homemaker learns to plan meals that do not mean too much

labor. She knows that if she does become a drudge, the phases of the higher life will suffer. She avoids company dishes that need attention the "last minute." Ten minutes spent in planning a menu will assist the beginner in having every detail ready at the right time. Plan the food for the day, and not for three separate meals; this method is both cheaper and makes less work.

The financial element.—In California, the homemaker considers no limit to the supply of food she may buy if she has a large budget, but the person who plans economically recognizes that food out of season is a luxury, and bears no relation to nutrition. She simply does not buy it. She uses leftovers and exercises care that she does not spend too much for additional materials to make the meal unprofitable and unwholesome.

The problem of the cost of food cannot be solved, it seems, by waiting for the price to go down. Apparently the only way is to study market conditions and to plan ahead. Remember that the cheapest foods are not always the most nourishing, and therefore not the most economical. The housewife must learn to judge foods which are both economical and healthful.

Divide your dollar into five parts. Use:

- 20 cents or less for vegetables and fruit.
- 20 cents or less for milk and cheese.
- 20 cents or less for meat, fish, eggs, etc.
- 20 cents or less for bread and cereals.
- 20 cents or less for sugar, fat, teas, coffee, chocolate.

Make out your grocery list for a week from these groups. Try to see where you can substitute a cheaper food and still have it wholesome. You may use a substitute for butter, in making cake. Take care that you do not scorch or burn foods. Pare fruit and vegetables carefully. Use food before it spoils. Save all fats and use them in cooking.

The meal must be neither too wet nor too dry. Color must not be overlooked for a meal where everything is whitish is unappetizing. Garnishing, preferably with the foods themselves, is a good thing, but requires art. Too much fat in any one meal is bad. Foods that are good for children are good for adults too. But not all foods for adults are foods for children.

Cereals are the cheapest form of food. They rank, in the following order, in point of cost and not in nutriment: corn, wheat, rye, cereals, rice, and oats. Oats stand first in nutriment. They contain equally good protein, twice the lime needed for bone growth, and more fat than the preceding cereals. As a fuel food, they are worth twice as much as wheat. Do not think, however, that wheat is not one of our best and cheapest foods. It is. If we did not have it there would be many times more malnourished people in our country than there are at present.

Next, after cereals, in point of cost per pound comes sugar. It must be used with caution for the body can use no more than 5 ounces a day, and any excess is stored in the liver and tends toward the promotion of disease. Sugar should be taken into the body by means of fresh fruits and honey.

More money is spent for fresh meat than for any other item although it ranks twelfth in importance.

*For further study, refer to "Use and Preparation of Foods," Home Economics Series No. 3, Bulletin No. 35, Federal Board for Vocational Education, Washington, D.C.

Exactly as much is spent for tea and coffee as for all fresh vegetables.

In a study made in New York City it was learned that food, ordered in commercial eating houses, varies greatly in price. A meal of the same food value costs from \$.26 to \$14.00, depending entirely upon where it is eaten.

Points to be remembered.—The homemaker must know the distinguishing marks of a well-nourished person. They are to be seen in the poise of the body; the clearness of skin, the glossiness of hair. They are noted, also, in good color, strong, smooth finger nails, shiny eyes, etc. The homemaker must always keep in mind the fact that she labors in vain unless her family shows these significant signs of a well-nourished body, for what she saves on the grocery bill goes to the doctor.

V. Spelling and English:

advantage	systematic	unwholesome	exactly
carefully	preferably	nutriment	avoids
unprofitable	expensive	economical	attention
various	modified	separate	beneficial
included	nutrition	substituted	requirement
luxury	effective	machine	preparation
compatibility	calcium	anemic	digestion
experimenting	resistance	tendencies	ancestors
disease	appetite	attractively	sufficient
abundance	recognizes	economically	mentally
idiosyncrasies	magazines	consideration	

VI. Applied science:

What is meant by "current magazines"?

What are calories?

Why is it that some foods agree with one and not with another?

What is meant by "food agreeing"?

Is there any advantage to the family in systematic meal-planning by the housewife?

Does a homemaker save herself physically and mentally by systematizing her kitchen processes?

Is expensive food always the most nutritious?

Trend of Vocational Education for Girls*

Miss Cleo Murtland, who is associate professor of vocational education at the University of Michigan, pointed out that the noticeable shift in attitude toward women workers in the past decade is creating new emphasis in vocational education. One of the most important changes is the breaking down of opposition to women workers that has occurred in nearly every field of work. These changes are forcing educators to think in terms of woman's whole life.

"Young women of today can exercise their right to earn without the clamor which women of the older generation had to raise," said Miss Murtland, "and the emergence of women from the mass employments such as teaching, office work, and salesmanship, is a significant movement."

Collegiate vocational bureaus, in their efforts to direct college women to new fields, have been a definite factor in this growth. "This vocational leaven among college women," believes Miss Murtland, "is affecting the status of girls who are not college trained, as well."

Throughout the entire country, schools are reflecting the changing attitude in their courses of study. Traditional

high school courses have been revised and new, distinctly vocational, ones added. Some of the new lines are art and design, nurses's preparatory courses, and courses for cosmeticians.

In speaking of women executives, Miss Murtland mentioned one who is vice-president of a large corporation, another a builder, and another a partner in a brick-making business.

In closing, Miss Murtland stressed the point that women must learn to realize and utilize the influence their active support can lend to these movements.

Guidance and Placement Work at Long Beach

The vocational and guidance bureau is a strong branch of the work at the Long Beach Part-time High School. Social, civic, and vocational counseling and guidance permeate every activity of the school. Follow-up work is continuous not only for those who have been placed on the job by the bureau, which is cooperating with the Junior Division of the United States Employment Service, but also for every student to whom a work permit has been issued. Whenever a student is sent to make an application for work, the superintendent of placement satisfies herself that the place in question is a wholesome one for him. If the nature of the work and the surroundings are unknown, she makes a personal call before sending the applicant. This bureau is for the entire school system, full-time high school as well as part-time students being placed through its efforts.

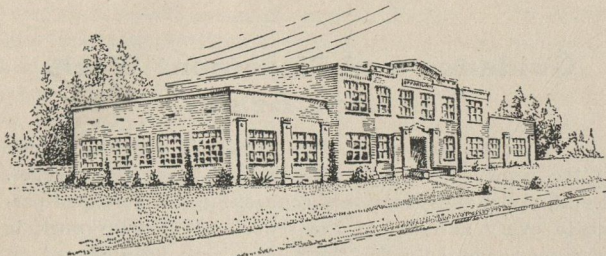
Another interesting feature of the work of the superintendent of placement is assisting full-time high-school teachers to determine whether a student should sacrifice some of his studies for the sake of work, or whether he should drop his job. Yet another interesting function is keeping in touch with minors on the job, and learning from the employer or foreman what the school can do to facilitate their advancement.

A great problem of the bureau is to establish itself as the clearing house for other agencies in the city which place minors up to twenty-one years of age. The Y.M.C.A. is now sending in weekly reports to this office giving the names and addresses of all minor applicants, the names of those who have been placed, and the names and addresses of the firms where they have been located. Many outside agencies have helped in finding employment for those who need it. First in importance of these is the part-time advisory committee. This committee serves not merely as an advisory committee, for its members act also as patrons of the part-time school. Due to the work of this committee during all of these seven years, the part-time high school of Long Beach and the junior placement bureau are recognized by the prominent business and industrial concerns of the city. Another agency is the central labor council of Long Beach which has long been in sympathy with the ideas of part-time education. This year, however, marks a special epoch in its relationship, for from now on preference is to be given to the junior placement bureau for all vacancies in apprenticeship.

* Summary of address given by Miss Cleo Murtland at Los Angeles, as reported in the American Vocational Association Convention Daily, December 18, 1927.

Dedication of Huntington Park Opportunity School

With Nicholas Ricciardi, chief, Division of City Secondary Schools, as the principal speaker, and with school officials and educators present from many points in southern California, the new building for the Opportunity School of the Huntington Park Union High School was auspiciously dedicated on the evening of January 13, 1928. The entire building was brilliantly lighted and open for inspection. Members of the part-time advisory board served as a reception committee and acted as guides to



Huntington Park Opportunity School.

the visitors. In addition to the decorations provided by the school, a number of beautiful floral pieces were received from organizations in the community.

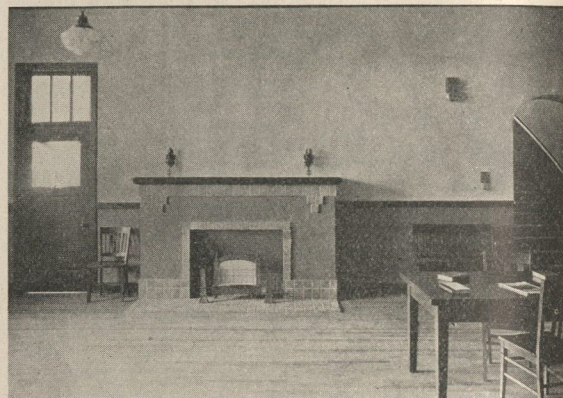
The program was held in the assembly room and adjacent section of the homemaking room. These two rooms, by means of the folding doors, connecting them, were thrown open as one large room capable of seating an audience of 350 or more people. Music was furnished by organizations of the high school under the direction of Miss Jane D. Wyatt, head of the music department of the school.

Arthur E. Paine, director of the opportunity school, served as chairman of the evening. County Superintendent Mark Keppel, who brought greetings from the county offices, complimented the school district upon having so progressive a board and principal and commended the part-time movement because of its opening the way to educational opportunity for many young people who otherwise would be wholly deprived of such privileges.

In presenting the building, Mrs. Helen B. Camp, president of the board of trustees, referred to the achievements of the part-time organization and the interest of the board and of the community in its continued success. In formally accepting the building, Principal K. L. Stockton spoke of the building as an investment which, through its service as a means of social adjustment, would doubtless be an excellent investment for the community. Mr. Ricciardi then gave a splendid address, taking as his topic, "The Place of Part-time Education in Our Secondary School Program." (See page 3.)

Among the visitors present were Superintendent F. F. Martin of Santa Monica, president of the California Teachers' Association, southern section, together with one of the Santa Monica board members, Mrs. Carlisle. Other visitors were: Benjamin W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles; John R. Hunt, county supervisor of attendance for Los Angeles County; Walter B. Crane, principal Metropolitan High School, Los Angeles; F. C. Weber, coordinating principal part-time branches of special classes, Los Angeles; H. O. Dyck, boys' vice-

principal, Metropolitan High School; Miss Mary A. Jones, coordinator, Metropolitan High School; together with other members of the Los Angeles part-time high school organization; Principal C. K. Berger and his faculty from the Pasadena Part-time High School; Miss Agnes Wolcott, principal of the Long Beach Part-time High School, together with her staff, including Benjamin H. Morrison, president of the part-time association of southern California; James L. Almack, director of part-time education,



Foyer.

Alhambra; Miss Alta Williams, counselor, Woodrow Wilson High School, Long Beach; Miss Viola Prenger, secretary, and Miss Maybelle Miller, a pupil of the Inglewood Part-time Department.

Vocational-Agriculture Cadets

An innovation has taken place in the training of vocational-agriculture teachers in this State. In the future a candidate for the full credential to teach vocational agriculture will, in addition to meeting the regular requirements, be expected to serve one full school year as an assistant in some agricultural department supervised by the state supervisor through the regional supervisors. Upon the completion of certain courses given in summer session, a select number of promising graduates of the College of Agriculture at the University of California will be placed on a part-time teaching basis in various high schools of the State. These cadets will spend their entire time in the school as assistants in the department; their actual teaching will be done on a part-time basis. They will receive approximately \$1,000 per year for their services. Half of this sum will be paid from district funds and half from State and Federal funds. Upon completion of certain required work in the summer session following their cadet year, the candidates will receive the regular credential to teach agriculture in the State.

The cadets will have the benefit of close supervision by the supervisors and teacher trainers. Two and possibly three one-day conferences, attendance upon which will be compulsory, will be held in each of the regional divisions during the fall semesters. A similar series may be organized for the spring semesters in addition to the regional conferences held in connection with the California Teachers' Association.

Trade and Industry Personals

A number of placements were made during the beginning of the present school term. Mr. John Motell has taken the position with the Berkeley Part-time High School as instructor of vocational drawing. In addition, he is conducting a class in boxing for part-time boys with great success. Mr. F. E. Peifer, who has been teaching automechanics at the Lick-Wilmerding High School at San Francisco has accepted a similar position with the Monterey Union High School. Mr. M. D. Taylor is teaching related subjects in the vocational department of the Stockton Union High School. Mr. H. H. Keyser has accepted a position with the Santa Rosa Junior High School. Mr. C. H. North and Mr. E. W. Kilgore have accepted positions with San Francisco junior high schools as instructor in automechanics and electricity respectively. Mr. W. T. Mills has taken the position in electricity at San Francisco Polytechnic High School left open by Mr. Sven Holmstrup, who is in Europe on a leave of absence. Mr. C. F. Von der Mehden is with the Albany Elementary and Junior High School, where he is teaching music and woodwork. Mr. F. L. Shelley is now teacher of electricity at the San Jose High School. Mr. W. F. Boos has accepted the position of machine shop teacher at Redwood City.

A New Course for Grocers

A recent development in vocational education in this state is the inauguration of a cooperative plan for the training of teachers for the retail grocery business. Mr. George W. Morrow, secretary of the California Retail Grocers' Association, and Mr. John C. Beswick, state supervisor of trade and industrial education, are cooperating in the promotion of the program. Outstanding grocers from the larger centers of the state have been selected to undergo a course of teacher-training with Mr. B. E. Mallary, supervisor of teacher-training classes in the San Francisco Bay Region, and with Mr. B. W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles. Instruction is given on the conference basis. The grocers who have completed the course will establish classes in various centers of the state, and will teach a course in the retail grocery business developed by the Bureau of Business Training of the National Association of Retail Grocers.

Part-time Personals

George H. Busch, who took his A.B. degree at the State Teachers' College at San Jose this year, is teaching the classes in citizenship at Stockton Part-time High School.

Fred W. Jaehnig, who has for six years been in charge of the part-time program at Petaluma, is now with the Sacramento Part-time High School where he gives the work for boys employed in trades, mechanical occupations, and drug stores. Ivan M. Lloyd replaces Mr. Jaehnig at Petaluma Part-time High School.

J. I. Wallis, formerly with Marshall Field and Company of Chicago, is also in the Sacramento Part-time High School, in charge of the athletics and citizenship for boys. Mr. Wallis takes the position left vacant by the appointment of John T. Peterson to the position of dean of boys at the Sacramento High School.

Miss Esther Darlington is in charge of the part-time work at Crockett.

At the Metropolitan High School in Los Angeles, Miss Jean Bernard, who has been coordinator for girls in the Los Angeles Department of Part-time Education since its beginning, with the exception of the past year, now becomes vice-principal for girls. During the past year, Miss Bernard has been doing advanced work at Columbia University, along the lines of research work in advisement for girls.

Several new instructors have been added to the staff of the Metropolitan High School. Miss Verna Benore, formerly of Santa Barbara, has been assigned to the homemaking and general continuation department, Mrs. Christine Connor is also working with the general continuation classes. She is transferring from the Sixth Avenue School. John A. Thompson, formerly superintendent of schools at Needles, California, is teaching classes at Van Nuys, North Hollywood, Owensmouth, and Pacoima. Charles W. Amlin has been given classes at San Pedro and Gardena. He comes from the Compulsory Education Department. Miss M. Isabel Tuthill, of the Marengo Heights School, has been added to the homemaking teaching staff. She will have charge of classes in San Fernando.

NEW BOOKS

Teaching Farm Work and Farm Mechanics, by G. A. Schmidt, W. Arthur Ross, and M. A. Sharp. New York, The Century Company. \$2.75.

This book is a comprehensive discussion of the problems arising in farm-work supervision: problems of organization, subject-matter selection, and methods of teaching, are treated in a thorough and practical manner. The chapters on farm mechanics and shop equipment meet a real need in agriculture teaching; references are very complete; and the authors' sound philosophy of vocational education may be counted on to bring agriculture teachers out of their insularity.

Instructional Units in Wood Finishing, by R. A. McGee and Arthur G. Brown. Milwaukee, The Bruce Publishing Company. \$1.60.

The series of units on woodfinishing gathered in this volume is well adapted to the needs of the secondary school. The units are worked out with due regard for their learning difficulties; the information contained in the book is pertinent and well presented. Selected references and questions should prove suggestive to the teacher of woodfinishing.

Industrial Education: Administration and Supervision, by Homer J. Smith. New York, The Century Company. \$2.50.

This work represents the results of an extensive investigation—carried on largely by means of the questionnaire—into the supervision and administration of industrial education. Professor Smith has gathered extensive data on the present status of industrial education in the United States, and has shed new and interesting light on the problems facing supervisors and administrators of industrial education. The book merits the careful consideration of anyone interested in the field of industrial education.

Roof Framing, by Thomas S. Rees and Paul C. Nelson. Milwaukee, The Bruce Publishing Company. \$0.64.

Sixteen instruction units on roof framing are here offered in booklet form; the units are developed on the order of the job sheet and are well illustrated.

Machine Work, by Theron J. Palmateer. Stanford University, The University Press. \$2.25.

Mr. Palmateer has written a book which should prove indispensable to the shop teacher in machine-shop practice. Without sacrificing its essentially practical character, the book contains considerable detailed information about fundamental machine-shop practices.

100 Problems in Woodwork, by William A. De Vette, compiler. Milwaukee, The Bruce Publishing Company. \$2.40.

The problems presented in this book have been selected from the pages of the Industrial Arts Magazine.

Coping Saw Work for Elementary Manual Training, by Edward F. Worst. Milwaukee, The Bruce Publishing Company. \$2.40.

Toys Every Child Can Make, by Harry B. Wright. Milwaukee, The Bruce Publishing Company. \$1.60.

New Publication

Developments in Part-Time Education in California; edited by Mary F. Mecredy, Executive Secretary, State Committee on Part-time Education for Minors. (University of California. Division of Vocational Education. Bulletin no. 23.)

In the foreword to Division Bulletin No. 23, Professor Edwin A. Lee, Director of the Division of Vocational Education, University of California, states, "This bulletin is published in order that certain important developments in part-time education in California, all pointing toward possible legislative changes, may be available in one document. Under the leadership of William John Cooper, state superintendent of public instruction, and Nicholas Ricciardi, chief of the Division of City Secondary Schools, a constructive effort to view the problem clearly was launched at a conference called at Fresno on October 1, 1927. This bulletin presents a resumé of the discussions which there occurred, and also lists the complete personnel of the state-wide committee suggested at that time, together with an indication of the type of problems with which the committee must deal. By request, there is also included in the bulletin the address on part-time education in California given by the Director of the Division of Vocational Education, University of California, at the annual conference of county and city school superintendents held at Coronado, October 3 to 8, 1927."

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

No. 3. Bulletin No. 2. An Analysis of Department Store Occupations for Juniors. December, 1920.

No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921. (A revision of Leaflet No. 2.)

No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.

No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.

No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.

No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.

No. 9. Bulletin No. 7. The Work of Juniors in the Telegraph Service. April, 1922. (Out of print.)

No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.

No. 11. Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922.

No. 12. Bulletin No. 10. Third Annual Report of the Director of Part-time Education. Stockton, California. October, 1922. (Out of print.)

No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.

No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.

No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.

No. 16. Bulletin No. 23. Developments in Part-time Education in California. February, 1928.

TRADE AND INDUSTRIAL SERIES

No. 1. Bulletin No. 12. Analysis of the House Carpenter's Trade. March, 1923. Price, 40 cents. (Out of print.)

No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.

No. 3. Bulletin No. 15. Analysis of the Plasterer's Trade. April, 1924. (Out of print.)

No. 4. Bulletin No. 16. Analysis of the Automechanic's Trade. June, 1925. Price 60 cents.

No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price 50 cents.

No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.

No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

AGRICULTURE EDUCATION SERIES

No. 1. Bulletin No. 8. Job Analysis Applied to the Teaching of Vocational Agriculture. May, 1922. (Out of print.)

No. 2. Bulletin No. 11. Farm Mechanics for California Schools. November, 1922. (Out of print.)

No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics.

GENERAL VOCATIONAL EDUCATION SERIES

No. 1. Bulletin No. 1. Syllabus of an Introductory Course on Part-time Education. January, 1920. (Out of print.)

No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price 50 cents.

NEWS NOTES

Part-time News Notes, v. I, Nos. 1-8. November, 1920-May, 1922. (Out of print.)

Vocational Education News Notes, v. II, Nos. 1-7, September, 1922-May, 1924. (Nos. 1, 3, and 5 out of print.) v. III, Nos. 1-9, October, 1924-June, 1926 (No. 7 out of print.) v. IV, No. 1, November, 1926. v. IV, No. 2, April, 1927. v. IV, No. 3, June, 1927. v. IV, No. 4, November, 1927. v. IV, No. 5, April, 1928.

Trade Education for Girls Through the Day Trade and Continuation Schools

The major development of trade education for girls in this country has taken place within the past quarter of a century. In fact it is so recent that women who were principals of the first trade schools of the country are still actively engaged in educational work. As with every social and educational movement, trade education for women did not spring into existence suddenly, but its roots go back to the spinning schools of colonial times.

Conditions Leading to the Establishment of Trade Schools for Girls

Industrial work is generally considered a new activity in the lives of women, yet woman has always been the great industrial producer for the family. As one by one her various trades left the home, the economic value of the wife and mother became less and she was forced to leave the home and follow one of her varied pursuits in industry.

So long as the home was the chief center of production, the training of the girl for her long list of trades was not a problem. The mother merely added the occupation of teacher to her already long list of accomplishments and trained her daughter to follow in her footsteps. Upon entering industry outside of her home the girl found the life more social and more exacting as to standards, but also far less varied and creative. She found open only the doors leading to the less skilled trades and to the most monotonous operations in those trades. As a result, those who could do so turned to business as an outlet for their abilities and left the industrial work for those who were less fortunate, economically or mentally.

An over-supply of labor, economic pressure, and low requirements for skill have all conspired to produce an unsatisfactory condition for women in industry. It is not surprising, therefore, to find that philanthropy rather than education or industry, started the movement to cor-

rect some of the unfavorable conditions in industry for girls. Early in 1902 there was an investigation of New York workrooms where women and girls were employed. (Woolman, 1910. p. 275.) As a result private funds were subscribed to provide training for the "youngest and poorest wage earners" in order to help them compete successfully for their self-support. After an investigation of five months, a selection of trades was made and a school opened on West 14th Street in a house built as a private home. In November, 1902, the first twenty pupils, 14 and 15 years of age, were enrolled and the work was placed in charge of Mrs. Mary Schenck Woolman, then professor of domestic art at Teachers College; Columbia University.

So great was the success of this school that it was forced to move to new quarters, and Mrs. Woolman's work became the inspiration and the pattern for other schools established in the next ten years. Boston opened a trade school for girls only two years later. Like the New York school, it was first a philanthropic enterprise. Miss Florence Marshall, who is now the principal of the Manhattan Trade School for Girls, was the first principal of this school. Both schools were free to pupils and were open the year round. (Woolman, 1907. p. 845.)

The influence of Boston seems to have spread to neighboring cities and Worcester and Somerville established trade schools in 1911, the former as one of the independent industrial schools of the state, and the latter as part of the public school system of the city. Cambridge followed in 1913 and organized a school on the model of the Manhattan Trade School as had the other trade schools of Massachusetts.

The first trade classes in Philadelphia were an outgrowth of a need felt during the war period. A special sub-committee, the Home Relief Division of the Emergency Aid Committee of Pennsylvania, assisted materially



Learning to make a blind hem by machine.

in the establishment of the first classes, in 1916. (Murtland, 1918, p. 7-8.) This school was also opened in a dwelling. A year later it was taken over by the School Mobilization Committee, moved to a business block, and Miss Cleo Murtland, now associate professor of vocational education, University of Michigan, was called to the principalship. In December of the same year it became a part of the public school system.

The Growth of Trade Education for Girls

The development of trade schools for girls has been slow and has in no way kept up with the entrance of girls into industry. After a quarter of a century there are probably not twenty full-fledged trade schools for girls in the country, while the number of women and girls in industry, according to the 1920 census, was about two million.

It would seem that the training given by the few trade schools would be of little consequence as a country-wide movement since so few girls have the privilege of attending such schools. The interest taken in trade education for girls and women, however, far exceeds the numbers concerned, and the experiment being conducted may lead to some very important conclusions.

Trade education for girls has not been confined to the full-time school but has appeared in many forms. Probably no city in the country with a population of 200,000 or more is without some so-called trade classes for girls in the regular high school. These classes have, in many instances, grown out of certain home-economics classes and are therefore strongly influenced by the so-called "double rôle" which each girl is expected to fill. Evening schools have also offered courses for women and girls in industry. These, too, in many instances, have been rather closely related to home-economics training. Their appeal is limited to the girl who is strong enough to stand two hours of training added to a full day's work, and it is not unnatural that in such cases many girls will elect courses which are for recreation, rather than for greater skill. Still another phase of trade education has been developed through the day continuation schools as a state-wide program in twenty-six states. The Eleventh Annual Report of the Federal Board for Vocational Education lists about 153,000 girls enrolled in part-time or continuation classes. Many cities do not receive federal aid and hence do not report to the Federal Board, so the number is probably much nearer 200,000.

The Aims of Trade Education for Girls

According to the official statement of the Federal Board for Vocational Education, "The purpose of trade and industrial education (for girls and women) is fourfold: (1) to prepare the girl for advantageous entrance into the field of wage earning; (2) to equip the girl for progression or advancement in the type of work in which she is already engaged; (3) to enable the girl or woman already employed to improve her civic and vocational intelligence; and (4) to enable the employed girl or woman to change to a more congenial or profitable occupation." (Federal Board, 1926. p. 20.) These aims, so far as they are being accomplished, seem to demand different types of organization as well as different types of curricula.

Training in the Day Trade School

The full-time day trade school is the institution which attempts to meet and fulfill the first aim, that is, of preparing for advantageous entrance into employment. Pre-employment training is given to girls and sometimes to older women in trades which seem to have the greatest teaching content. The list of trades chosen for the Manhattan Trade School was decided upon after a survey of several months. It was found impractical to attempt to train girls for each specific trade in which they found employment; hence, the training was centered about the four tools which were found to be used most often by girls. These tools were: the sewing machine, the paint brush, the paste brush, and the needle. (Woolman, 1907. p. 840.) But each city has its own peculiar industrial problems and other cities following the programs of the Manhattan Trade School have not always met with as great success. Not every city, for example, can employ a large number of power sewing-machine operators; and few cities have work in the pasting of samples. When the trade-school program failed to dovetail into the industries of a community recourse was sought in the teaching of skills which might be useful to a girl as a homemaker. In 1912 the American Federation of Labor, through one of its committees on industrial education, indicated that the training in many cases was not fulfilling the aims which had been set up. They said that although women were found in increasing numbers in almost all productive industries, comparatively few occupations open to them demanded specialized training. In many cases, they said, a general conviction that girls should have, or were demanding, some vocational training had led to the introduction of the traditional trades, dressmaking and millinery, into schools without due consideration of local conditions of work, wages, or chances of employment. They also pointed out that there had been little recognition of training possibilities for vocations that might offer better opportunities for girls. (A. F. of L., 1912. p. 62-92.)

The lack of funds and of persons skilled in making surveys for this type of work are, in part, responsible for the failure of the early trade schools to meet the needs of the local community. Another difficulty beset the trade-school movement. It was felt that "women's traditional sphere" was not being recognized when girls were being trained to leave home and find employment in industry. A survey of results in 1917 reported that, "Trade schools at first met much serious criticism and there was a conscious emphasis by their supporters on their educative value and their development of the girl as a future homemaker." (U. S. Dept. of Labor, 1917. p. 9.) This confusion in the aim of the trade school has, no doubt, been one cause contributing to the slow growth of trade education for girls; but other factors have also had an influence. Perhaps it has been the misfortune rather than the fault of industry that it has not attracted the young girl, but rather has been the last resort when employment could not be found in other lines. Only one type of employment is considered by the girl as less desirable than factory work, according to junior employment bureaus, namely, domestic service. Many a girl does not face the fact that she will probably find no doors open to her other

than those of the factory, and so does not ask for training which will help her to enter this field advantageously. When the day comes to seek employment, therefore, she must find an industry in which the entrance requirements are low. The reputed short period of work for girls is another difficulty in the path of trade education. Why train a girl for some skill requiring several months when she may be in industry only a year or two, is asked by the public and by the girl herself. Paul Douglas voices this sentiment in a publication of 1921, saying, "This transient nature of women's work has a dual effect: (a) it prevents them from doing skilled work in the industry in which they are engaged, and (b) it tends to unfit them for housekeeping which most of them later enter." (Douglas, p. 134.) This opinion is held in the face of the fact that an ever increasing number of married women are in industry, some of whom married with no interruption of work, and others returned to work after a year or two. The telephone companies in some cities depend almost entirely on the return of married former employees for relief work of all kinds, holidays, conventions, and other times when there are peak loads, thus capitalizing on the rather expensive training which they have given a girl and upon her partial support by her husband. The garment trades which employ girls from a lower economic and social level in one city reported that a large proportion of their power-machine operators continue with them after marriage. It must be admitted, however, that the girl who is just leaving school probably still *expects* to end her gainful employment at marriage.

Employers have met the problem by greater and greater specialization so that factory work has become easier to teach to the untrained worker. In the processes requiring the least skill the girls and women most readily find employment. The full-time trade school for girls, then, is beset by difficulties on all sides and can meet the needs of only a comparatively few girls who will enter industry. Public opinion, the ambition of the girl, the actual employment conditions, and the nature of the work all point to a definite limitation of the field of full-time trade education for girls.

The Curriculum of the Trade School for Girls

As was indicated earlier the first trade school centered its training program about the four tools: the sewing machine, paint-brush, paste brush, and needle. A few new offerings in laundry work, cafeteria and tea-room cooking and serving, and beauty-parlor work have been added in recent years. As the work is largely given in two-year courses made up of a number of short units, the trades chosen must be those with a rather full teachable content and a skill which can be acquired away from actual employment conditions. Many of the trades in which girls are employed do not offer such a content as will be seen by an examination of some of the investigations in various cities. According to a study made in Philadelphia, which will be discussed in more detail later, only 14 per cent of the girls under 16 years of age were engaged in occupations requiring any appreciable degree of skill. In Detroit a group of about 800 girls under 17 years of age, who were engaged in 54 different occupations, estimated the length of time necessary to learn

the work in which they were engaged. The following table summarizes the results:

Length of Learning Period	Number of Girls	Per cent of Girls
1 hour	20	5.5
1 day	64	16.9
1 week	199	52.6
1 month	83	21.9
6 months	6	1.6
1 year	4	1.0
Over a year	2	.5
Total	378	100.0

It is evident from this report that more than half of the girls are employed in jobs which they, at least, think can be learned in a week, and only 3 per cent are in jobs which they report take more than six months to learn. (Crockett, p. 37.)

Still another study made in Pittsburgh, Pennsylvania, indicates that out of 250 girls investigated, 60 per cent were in factory work and that "very few jobs open to them offer a chance for advancement." (McClure, p. 4.) If these figures represent conditions generally in the employment of girls it can easily be seen that the two-year trade school is not adapted to the needs of any large percentage of the girls in industry.

This apparent lack of skilled trades for girls, together with the prevalent idea that girls must be trained for a dual rôle of wage earner and homemaker, has, no doubt, been influential in shaping the program of most trade schools for girls. The Manhattan Trade School requires of each girl a unit in cafeteria cooking and service, regardless of the trade which is being taught. The Philadelphia school apparently makes the same requirement as this paragraph is included in the superintendent's bulletin for 1927:

"Now that the school is moved to the new building, courses in food preparation and household management will be provided. This is considered desirable, *since every girl lives in a home and ultimately will have a home to manage*, and in both relationships has duties and responsibilities which she should be prepared to discharge."

The Denver Opportunity School and the Frank Wiggins Trade School in Los Angeles are newer trade schools and cater to an older group of women; in fact, to both men and women as well as to younger boys and girls. In neither of these schools is there any definite requirement of additional time or courses beyond the regular courses essential to the trade. If a girl finishes a course in six months instead of nine she is not retained for the year.

A recent article on the Frank Wiggins Trade School stated that, "Graduation does not come at the end of a given period of time, but a certificate of completion is given to the person whenever he has accomplished successfully the work of a particular training program; for a period of six months after his leaving school he is carefully followed up, and if he is able to 'carry-on' efficiently in the actual work of this trade, he is then granted a Certificate of Proficiency. Accomplishment alone is a measure of a student's progress." (Kunon, p. 17.)

In the schools for the younger group exclusively there is an evident desire on the part of the trade school to give a more or less rounded education while the trade

training is being given, hence the requirement of one or two years in these schools. The two western schools are co-educational and have large enrollments among older workers who have given up one kind of work to prepare themselves for a new trade or to secure more preparation in a trade in which they have been employed.

It can easily be seen that the young woman of twenty or twenty-five who attends the trade school is much nearer the period when she would have need for the courses relating to the home, but no such training is made compulsory. It remains to be seen whether or not the trade school for the younger girl is justified in combining some phase of homemaking with trade training. On the other hand, if it is found justifiable in the girls' schools it may even be found profitable to add to the boys' trade-school courses work in home crafts, such as are given to boys in home mechanics in pre-vocational schools; but it is hard to believe that boys who are eager to secure training and find employment could be induced to lengthen their training to include such work.

The Boston Trade School for girls follows a program similar to the Manhattan Trade School except the course in paste work which is not included. The Philadelphia school, according to the bulletin published in 1927, offers: "Dressmaking, a two-years' course; millinery, a two-years' course; and power-machine operating, a one-year's course. There has been a chance for girls with artistic ability to specialize in costume designing, and for others of unusual taste and manual dexterity to prepare for the novelty trade and for decorative needle-work." (Broome, p. 7.) Both the Manhattan Trade School and the Philadelphia school use the Dalton Plan of instruction for the half day which is spent in academic subjects related to the trade. A set of "contracts," one in each subject in her course, is given a girl and she may budget her time and work as rapidly as she is capable. English, civics and economics, hygiene, arithmetic, applied art, and textiles are among the related subjects given. (Broome, p. 13-20.)

The Frank Wiggins Trade School in Los Angeles is, as has been said, a co-educational institution and includes adults. Probably for that reason it offers a wider range of courses to girls and women. The following courses were listed in 1926:

Advertising illustration	Monotype keyboard
Alteration of women's clothing	Pastry making
Beauty culture	Power sewing-machine operation
Bindery operations	Pressing
Cafeteria and restaurant cooking	Salad making
Cafeteria and restaurant service	Show-card writing
Commercial art	Spotting
Commercial telegraphy	Telephone switchboard
Dressmaking and design	Interior decorating
Electric elevator operation	Multiplex telegraphy
Millinery and flower making	Lunch counter work

The number of trade schools for girls and women is small in comparison with the number of women in industry. The Manhattan Trade School which is the largest, cares for less than 1500 girls at a time, which means only about 750 completing the courses each year. The 1920 census shows that, of the eight and one-half million women gainfully employed, nearly two million are in industry. It is evident that the few trade schools cannot begin to serve any large proportion of women who go into

industry. The 1926 report of the Federal Board for Vocational Education gives 5,430 as the complete enrollment of females in all-day trade classes reimbursed by federal funds. Were the number of girls and women enrolled in classes not so reimbursed as large, which is very doubtful, there would still be only about 10,000 out of the two million served.

This is not, however, an argument for further extension of trade schools for girls, but for further study of local conditions to see what service can be given girls in each community. Mrs. Anna L. Burdick, in a bulletin of the Federal Board for Vocational Education, says, "Day trade schools for girls are few, and schools offering industrial courses as part of their work are not common. This is partly due to the long-prevailing public attitude that the industrial world is not the place for women, and that a training which fitted them for anything but home life would be highly undesirable." (Federal Board, 1920, p. 11.) This is no doubt true, but other considerations growing out of this fact are quite as cogent. Women have not yet found a way up through industry. A few women have become personnel workers, and in rare instances a woman becomes a mechanical engineer or an efficiency expert, but as a rule these women have not come up through industry. Forewomen and owners of small shops are the only positions as yet achieved by the woman in industry. Until women can find a future in industry the woman with ability will not be drawn into this field, and, through a vicious circle, until women of more ability go into industry the positions requiring more skill will not be open to them. This deadlock is being broken in part by the special training given in industrial plants to foremen and forewomen and other supervisory officers. The Federal Board for Vocational Education has, for a number of years, emphasized the importance of foremanship training, of helping industry see that each plant is a training school as well as a center for production. (Federal Board, 1920, p. 30.)

The summer schools for women in industry, such as have been given at Bryn Mawr and now at one or two other colleges, represent another attempt to make leaders of the women in industry. As they come to see their relation to the whole labor movement it is hoped that they may find a way of securing for themselves and for their co-workers some of the more spiritual rewards of the producer.—E. G. P.

(To be continued.)

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Summer Forums Define Goals of Vocational Education

For the purpose of extending to educators and employers aid in the solution of vital problems in vocational education, a first series of conferences and forums was held in Berkeley, July 9 to July 20. The conferences were sponsored by the Division of Vocational Education of the University of California, in cooperation with the State Department of Education. Immediately following the meetings at Berkeley a similar series was conducted at the University of California at Los Angeles, July 23 to August 3. The general topics discussed during each two-weeks' period were vocational guidance, cooperative, trade-extension, and part-time education.

The meetings were divided into two general divisions: forums which were held in the evenings and were open to all who desired to attend; and conferences which were held in the afternoons and were open only to those who had had experience or contact with the problems to be studied. In the forum meetings one or two speakers of prominence in a particular field of education, labor, or business presented certain viewpoints upon the topic of the evening. Following the speakers, a forum leader conducted the group discussion which was open to the members of the audience.

The programs and forums were arranged by Donald H. Biery, and their success was due to his program of publicity and to the able speakers and conference leaders whom he secured. Summer-session instructors and members of the State Department of Education contributed to the programs of the two series of conferences.

Changes in Trade Teacher Personnel in Northern California

The following changes of position and placements of vocational teachers are reported by the Division of Vocational Education and the office of the Appointment Secretary of the University of California at Berkeley:

Alameda.—Carl Opdahl, who has had many years of vocational and pre-vocational work in Montana starts his teaching experience in California in the Alameda Junior High School. J. A. Hull, a new teacher, will teach vocational carpentry at Alameda High School.

C. R. Bromley, formerly superintendent of a large San Francisco electrical shop, goes to Alameda to fill the posi-

tion left vacant by J. A. Woods in the electrical shop of Alameda High School. Earl W. Shriber has been appointed teacher of related subjects in the same school.

Berkeley.—Harold G. Bellus has left Alameda High School to teach Smith-Hughes sheet-metal work in Berkeley High School.

English for vocational students in Berkeley High School is taught by Mary E. Banks, formerly of Santa Cruz.

Crockett.—A. W. Rees, who was formerly joint owner of a large Oakland planing mill and who has had vocational teaching experience at Dunwoodie Institute and Milwaukee Continuation School, goes to Crockett to start Smith-Hughes courses in millwork in the John Swett Union High School. Walter Burke, formerly foreman of the toolroom of the Pacific Deisel Company of Oakland, will conduct the machine shop classes at Crockett.

Eureka.—Charles J. Dreyer has accepted the position at Eureka High School formerly held by Byron G. Nason.

Martinez.—David Culbertson, who has been teaching at Ferndale for the past four years, has been elected at Martinez High School.

Modesto.—J. K. Barnett, formerly instructor in auto-mechanics at Modesto has been promoted to head of the department and general coordinator for the trade and industrial work at Modesto.

Oakland.—C. A. Finn has left San Francisco to become an instructor of printing in Oakland; John Mahoney, who has been teaching in the Hawaiian Islands for the last six years has accepted a position in one of the Oakland junior high schools; and Stanley A. Ward, formerly instructor in carpentry in Alameda, has gone to Oakland High School to organize Smith-Hughes work in carpentry.

Max Stoker, formerly of Piedmont High School, is now in charge of the educational work at the Montgomery Ward Company of Oakland.

Red Bluff.—W. R. Rouston left Elk Grove High School to assist Fred Danner in the Smith-Hughes auto shop at Red Bluff.

San Francisco.—H. A. Vahlbusch and Samuel Derby have gone directly from the automobile trade to do technical writing for the "Pacific Radiator." P. C. Clinkenbeard, formerly of Yuba City, has gone to San Francisco as a general shop instructor in the new Balboa High School. Byron G. Nason, after five years with Eureka High School, has accepted a position in San Francisco.

W. T. Mills, who substituted last spring in San Francisco Polytechnic High School for Sven Holmstrup, has been transferred to a junior high school electrical shop on account of the return of Mr. Holmstrup from Europe. E. R. Speed, formerly instructor of printing at San Mateo, has been elected to a San Francisco position.

Santa Barbara.—James A. Woods of Alameda High School electrical shop was recently appointed general coordinator in Santa Barbara.

Santa Cruz.—W. T. Elzinga, who is very well known among the vocational teachers of California, has resigned from his position as machine shop instructor at Santa Cruz to enter business.

Yuba City.—Jack Roberts, who has been at Ceres High School for the past six years, has gone to take charge of the auto shop at Yuba City High School.

First-year positions.—The following men are doing their first year of teaching in the field of trade and industrial education:

George B. Williams, housepainting, Berkeley.
 Jesse Peter, pre-vocational woodwork, Santa Rosa.
 J. D. Sanderson, junior high school general shop, San Francisco.
 Frank Shelley, Smith-Hughes electrical work, San Jose.
 George C. Jones, pre-vocational electrical work, San Francisco.
 R. Farrell, pre-vocational sheet-metal work, San Francisco.
 Charles S. Walker, automechanics, King City.
 J. H. Hunter, automechanics, Berkeley Evening High School.
 Robert Thatcher, printing, San Francisco.
 George E. Davidson, machine shop, Lick-Wilmerding, San Francisco.
 F. C. Gilbert, Smith-Hughes related subjects, Richmond High School.
 M. J. Brinkerhoff, machine shop practice, Santa Cruz.
 R. E. Barnett, pre-vocational woodwork, San Francisco.
 H. F. Bergstrom, general shop, Martinez.

B. E. M.

Agriculture from Arcata to Araz

From the Oregon line on the north to the Arizona line on the south, California is divided into six sections under the direction of four regional supervisors of agricultural education. The north coast section has nineteen high schools teaching Smith-Hughes vocational agriculture, and registration in these classes is growing so that more teachers and classrooms have been added for the present year. Arcata has just completed a new farm shop building to care for her growing needs; Calistoga is introducing for the first time a vocational agriculture course this year.

Many schools are now laying plans for evening classes in agriculture and farm mechanics for the farmers in their districts. This is a form of parental education for which agriculture has long deserved the credit. When the parents cooperate, the boys' home projects can be more easily carried out and some of the boys have been so successful financially that they have made enough money from their projects to give them a start in college or in business upon completing their high-school work.

Regional and local meetings for teachers of agriculture form a net-work over the state. Each month the agriculture and farm mechanics teachers of Humboldt, Lake, and Sonoma counties meet for an informal discussion of problems in agriculture. Nor are these gatherings entirely professional in program. A dinner and social meeting usually follow the discussion of teaching problems and each part of the program has value for the teachers of the district.—H. F. Chappell.

Prize.—Through the cooperation of the California Dairy Council, which has in many ways aided agriculture programs in the state both financially and otherwise, a butter essay contest has been arranged in order to stimulate interest among high school students in the production and consumption of dairy products. Prizes amounting to \$500 have been offered for essays due December 1, 1928.

The Study-Plan Institute

"I didn't get a thing out of it!" Who among us, attending institute for years, has not heard this said many times? Often this saying has come from teachers who represent the special subjects. To them a general program, such as is usually found at institutes, has little or no interest.

A partial departure from the common run of institutes was held at Chico this year. There were a few general meetings, at which speakers of note were given an opportunity to present new ideas in education, but most of the time the teachers attended school for five days a week, discussing subjects of their own selection. For this work they received a unit of college credit which will count toward a higher credential.

In this plan there lies an opportunity for vocational education. At any institute why should not the vocational teachers meet by themselves, choose their leaders and their topics for study and discussion?

Thirty-five agriculture and farm-mechanics teachers did this at Chico this year. Certain able teachers led the discussions. The result was a working outline of a four-year course in agriculture and a two-year course in farm mechanics of which the entire group approved as a basic course. There were no absentees from the meetings, and everybody went home saying it was the best institute he had ever attended.—A. G. Rinn.

Boys Compete at State Fair

Edward W. Everett, supervisor of agricultural education in the Fresno district, was in charge of the annual live-stock contest for high school boys, held at the State Fair Grounds at Sacramento on Saturday, September first. Two classes each of beef cattle, dairy cattle, sheep, horses, and hogs were judged, with sixteen teams competing, representing high schools from as far north as McArthur and as far south as Hemet.

The contest was won by Healdsburg High School with a score of 1852 out of a possible 2250; the second team was Woodland, score 1831; the third team was Salinas, score 1813; the fourth team was Willows, score 1633; and the fifth team was Hollister, score 1615. The high individuals of the contest were Henry Lanini of Salinas, with a score of 644; John O'Brien of Healdsburg, score 627; and John Mahan of Hollister, score 624. This contest was made as educational as possible and after the boys had given their oral reasons justifying their placing, the judges explained each of the classes that the boys had judged.

The second contest in dairy products was held Saturday afternoon, September first. One class each of milk, butter, and cheese was judged. The high team of this contest was Riverdale; the second team was Lodi; the third team was Santa Rosa; the fourth team was Santa Maria; and the fifth team was Petaluma. Eight teams competed in this contest. William Henson of Riverdale was high man of the contest; William Pirie of Lodi was second man; and Norman Adams of Lodi was third. When the contest was completed, the boys were permitted to go over the classes and compare their places with the official placings of the judges.

Humanization of the Home*

How often do we hear some one say, "I am not artistic!" Many of us have felt that art is for the few and that we are outside the understanding of it. Perhaps it is a mysterious will-o'-the-wisp, or a gift from heaven bestowed upon a chosen few, but denied to us.

Arthur Dow did much toward aiding artists and art teachers in capturing the elusive achievement called "art," in clearing up the mystery surrounding it, when he gave to the world his book called "Composition." It is more than probable that Mr. Dow, himself, was unconscious of the magnitude of his contribution to the field of art. He unquestionably played the part of the sturdy pioneer. Since then much has been written on the subject, and the teaching of art has developed until it is possible for all to attain art training and to gain the development of what might be called "art consciousness."

Art and Order

As teachers of home economics, I feel that you should avail yourselves of art training in order to gain a deeper appreciation and practice of the subject. Such courses as art-principles, art-appreciation, interior decoration, and even beginning courses in architecture have a direct application to the home and the schoolroom. You, as a group of instructors, are in a way to achieve much good. It is up to you to plant ideals of order and therefore art in the thoughts of your students. This can be done in costume-designing, table-setting, flower-arranging, landscape-gardening, and in the innumerable ways of working out harmony in the home.

There is no longer an excuse for the old plea, "I am not artistic." What you probably mean is that you are lazy, or that you will not make the effort to overcome that imaginary inferiority complex concerning art. Art may be an open book to you, if you will give it thought and time.

Order seems to be one of the first principles of art. If one were to work out her home and its furnishings with the same precision and care that she gives to the arranging of a dinner table, there would be an architectural excellence evident and the result would be surprising. Studied carelessness is responsible for much that is distressing in art, and might be classed many times as "artie."

The criss-crossing of furniture and rugs, draped-back curtains, table and piano crushes, not to mention decidedly figured wallpapers are nightmares that one still sees in broad daylight. As art consciousness develops, the student outgrows the grewsome fol-de-rols of yesterday. The development of the art of selection within the individual is the work of the teacher and should be part of your preparation.

If there is a debt we owe to Art Moderne it is for the simplicity and order that the best of it stands for. There is a freshness and a directness in modern furniture and art objects that is indicative of better things to come.

* Excerpts from an address given by Richard Allen, artist and interior decorator, San Jose Teachers' College, San Jose, at the July annual meeting of the California Vocational Association in Berkeley.

Remember this: the home of the future will become more and more an art laboratory for the homemaker. When housewives make a serious study of art in the home—and this may be manifest in the preparation of food as well as in the color arrangement of the house—there will be better homes as well as houses.

The whole world is keyed to art in one way or another. Business methods are a good example of art; machinery is another example, with the automobile as the most perfect expression. Art has made marvelous strides in dress, especially in feminine attire.

Art Renaissance

Architects, furniture designers, and interior decorators are awakening to the possibilities of creating new forms and not merely copying or adapting what has been done before. The entire world is astir in a renaissance of art—art made practical in every-day life. A real artist is one who possesses a love of beauty and produces beauty in any one of a myriad different ways. Perhaps a simple flower arrangement may possess the vital quality of beauty.

Your position, as teachers of homemaking, is unique in its possibilities to achieve, so it behooves you constantly to enlarge your vision. It is possible today for all of us to gain enough of an appreciation of beauty and art to convert our daily life into a much more thrilling experience.

New Books for the Home Economics Teacher

Harris, Jessie W. *Home economics home project record book for supervised home practice and home project work.* Houghton, Mifflin Company. This is a bound pamphlet with printed instructions for the students, providing blank spaces for a complete and detailed record of the project undertaken, designed to help the teacher in the supervision of home-project work, especially where visiting is limited.

Kinyon, Kate W., and Hopkins, L. T. *Suggestions to teachers of junior home problems and junior food and clothing.* Benjamin H. Sanborn and Company. Deals with problems of the home, family, and community life in terms of creative education; that is, fitting girls for a more abundant life in the present-day environment. In the discussion of the details of content for courses, this broader vision is not lost sight of.

Trilling, Mable B., and Williams, Florence. *Art in home and clothing.* J. B. Lippincott Company. A text for art and home-economics classes consisting of three sections: the first on color and design; the second on applying art principles in the home; and the third on clothing design and selective discrimination.

Harap, Henry. *The technique of curriculum making.* Macmillan Company. Steps by which the student may make a new course of study or revise an old one, and also evaluate a course of study.—M. I. M.

Education Week in Part-time School. Alumni of the Berkeley Part-time School participated in the "Education Week" program telling the guests, who were seated about tables where refreshments were served by the girls of the homemaking department, how the part-time school had helped them in their work. Parents, pupils, and graduates all expressed gratitude for the service rendered by this school.

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STATE COMMITTEE TO MEET

Vireling Kersey, chairman of the state committee on part-time education, has called a meeting of his regional chairmen for November 24, at Fresno. At this meeting the regional chairmen will consider the report to be made to the general committee and decide upon a date for calling the state-wide meeting. Social workers, attendance supervisors, and others interested in part-time education will be invited to attend the general meeting.

A NEW DEPARTMENT

The California Vocational Association will, beginning with this issue, have a section of the Vocational Education News Notes devoted to its special interests as an organization. Hereafter the Association will have complete responsibility for this department, with E. E. Ericson, head of the industrial arts department of Santa Barbara State Teachers' College, as editor.

DR. RICCIARDI HONORED

Stout Institute, a state institution at Menomonie, Wisconsin, established to train teachers for industrial arts and vocational subjects, has recently granted an honorary degree of Sc.D. to Nicholas Ricciardi, chief of the division of city secondary schools, State Department of Education. This degree has been granted by Stout Institute to five or six other men prominent in the field of vocational education, among them J. C. Wright, director of the Federal Board for Vocational Education; R. L. Cooley, director of vocational education, Milwaukee, and president of the American Vocational Association; and Charles R. Allen, editor and educational consultant, Federal Board for Vocational Education. Dr. Ricciardi received the degrees of B.L. and M.L. at the University of California.

NEWLY APPOINTED CHIEF

Dr. Ira W. Kibby, newly appointed chief of the bureau of business education of the State Department of Education, was transferred from the state bureau of civilian vocational rehabilitation. The bureau of business education is a new bureau designed to promote and serve the interests of business education in the same way that state supervisors have served other phases of vocational education.

Business training and experience, teaching and administrative work, and graduate study and higher degrees have given Dr. Kibby an unusually fine background for the promotion of business education in the schools of the state.

NEW CENTER FOR AGRICULTURAL TEACHER-TRAINING

During the spring of 1928 a series of conferences was held with representatives of the State Board of Education, the College of Agriculture, and the Division of Vocational Education participating, relative to increasing the effectiveness of the agricultural teacher-training program. The outcome of the conference was a decision, in which all concerned concurred, to transfer the center for agricultural teacher-training from Berkeley to Davis. The move will make possible a greater degree of active cooperation on the part of the College of Agriculture in the program of the Division of Vocational Education, and should result in a larger group of well-trained teachers of agriculture, thus meeting a need which heretofore the University has not met adequately.—E. A. L.

Part-time education is a sort of "tap-the-hoop" process. You keep it going by touching it once in a while.—R. L. Cooley.

WALTER B. CRANE

This is being written in appreciation of the contributions, educational and social, made by Walter B. Crane, late principal of the Metropolitan Part-time High School of Los Angeles, whose death occurred on August 3, 1928. In addition to being written for the teachers of the whole state, it is being written by one who has had the opportunity not only of knowing Mr. Crane professionally, but also of knowing him as a man and as a neighbor.

Mr. Crane was born in Cincinnati, Ohio, in 1880, and received his early education in that state. His first experience in the teaching field was obtained at Norwood, Ohio. For sixteen years he has been identified with the Los Angeles public schools. He came here as a teacher of elementary grades and from that point worked up through this system.

The history of part-time education in California has been one of sound and rapid development. Mr. Crane has played no small part in the success which the part-time-school movement has attained in this state. He was one of the group that made a special study of part-time education when the law was first passed in 1919, and was one of the first associates of Vierling Kersey in the planning of the program for Los Angeles. Since that time he has grown with the movement and much of the credit for the splendid institution which Los Angeles now claims is due to his untiring efforts.

An Indian guide, who was once questioned on his ability to pick his way carefully through the dense underbrush and at the same time maintain his sense of direction, replied, "Indian guide, him have near look, far vision," and how truthfully can it be said that Walter B. Crane possessed these two attributes. He possessed the "near look" which enabled him to see the problems of the immediate present and to conduct the daily routine of part-time education with the least friction and the greatest good to all concerned, but always while busy solving the problems of the day he maintained that "vision" of the future which would bring part-time education to the fullest realization of its aims and objectives. He cherished the vision of a program of part-time education as a part of our complete educational program, not as a thing apart from it.

It was this vision that prompted the directors of the California Teachers' Association to elect Mr. Crane as president of the board of directors of that association upon the resignation of the late Mark Keppel, who had for so many years occupied the position. The presidency of the California Teachers' Association probably represents the highest honor that the teachers of California can confer upon one of their number. It is to be regretted that Mr. Crane was not given the opportunity to imbue the state organization with his ideals, and to help it in its marvelous growth.—HOWARD A. CAMPION.

SUMMER SESSION AT U. C. L. A.

The visiting staff in vocational education at the University of California in Los Angeles was headed by Dr. Edwin A. Lee, director of the Division of Vocational Education at the University of California. DeWitt S. Morgan, assistant principal of the Arsenal Technical

Schools of Indianapolis, Indiana, conducted the course in civic and employment relations. This is the third visit Mr. Morgan has made to California in the past seven years. To him credit is due to the creation of this particular course, as he developed it for the first time in Indiana. Dr. Lewis A. Maverick, lecturer in education and recorder at the University of California at Los Angeles, joined the vocational group and conducted a course in vocational guidance.

Dr. Frederick Horridge, appointed the past year as director of vocational education for Long Beach, conducted two courses in vocational education. William S. Kienholz, director of vocational education for the Los Angeles City Schools, gave a course on theory and administration of vocational education; Albert E. Bullock, supervisor of commercial education in the same city, gave the courses in the principles and methods of commercial education.

Other leaders in vocational education on the staff were: Howard A. Campion, principal of the Frank Wiggins Trade School; Arthur G. Waidelich, his assistant; Leslie G. Stier, supervisor of vocational education for the Los Angeles City Schools; and Claude E. Nihart, supervisor of industrial arts in junior and senior high schools.

A number of new courses were offered for the first time the past summer. "Analysis and organization of related technical curricula" was a course designed for a "hand-picked" group. It was especially organized for graduates of the vocational teacher-training course who desired to teach the subjects related to the trade. The course was organized on a 90-hour basis and a sufficient number attended to require the organization of three groups. George C. Wright, head of the mechanical drafting department of the John C. Fremont High School, had a group made up of teachers of automechanics, machine shop practice, electricity, and mechanical drafting. Van C. Walton, printing instructor at the Van Nuys High School, had a small group of printers and two carpenters. Mrs. Duleie G. Donovan, instructor of related science and art at Beverly Hills High School, headed a group of millinery and dressmaking teachers. The work was conducted on the seminar basis. The trade groups were organized into committees with committee chairmen; they attacked the problem successfully in determining the related work of the trades represented, organizing it for instructional purposes and determining the best instructional methods for teaching it.—B. W. J.

A BOOK FOR VOCATIONAL COUNSELORS

Teeter, V. A. *Syllabus on Vocational Guidance*. Macmillan, 1927. Mr. Teeter has done a most interesting piece of work in his latest book on guidance. Counselors, particularly those who have had to face the problem of counseling without any training therefore, have long needed such a book. The syllabus will probably be most helpful to the teacher because of its excellent bibliography, and the wealth of questions, problems, and topics included as a part of each lesson. In the hands of students, if used as the author indicates, there should result an intelligent appreciation of the work of the community, the need of training for whatever work one chooses, and definite help in selecting and preparing for that occupation. Whether used as a text or not, the book should be in the library of every individual interested in, or responsible for, classes in guidance or citizenship.—E. A. L.

C. V. A. Holds Second Annual Conference

In a gathering of vocational teachers from over the entire state, the California Vocational Association held its second annual conference in Berkeley, July 13 and 14. The president of the association, Ralph W. Heywood, instructor at Jefferson High School, Los Angeles, opened the conference, and delegates were welcomed by Dean Harold L. Bruce, dean of the Summer Sessions, University of California. Addresses were made by Dr. Harry A. Overstreet, professor of philosophy at the College of the City of New York, and Dr. Margaret M. Alltucker, assistant director, research division, National Education Association, Washington, D. C., both visiting instructors of the summer-session period.

Dr. Overstreet emphasized the fact that industry has much to give to education, and that the conference method, now in use so successfully in many trades and industries, should be introduced in education. Teachers should no longer stand before their classes, pouring out information, he pointed out, but should confer with their pupils and act as skillful guides for discussion and encourage pupils to bring original ideas to the conference.

Dr. Alltucker talked of the necessity for a well-balanced education, and showed that the first need of adolescent boys and girls apparently was guidance and the second need, vocation.

W. C. Patchett, president, California Agriculture Teachers' Association, presided at another general session. Dr. Theodore Macklin, professor of agricultural economics, University of Wisconsin, gave an address on "Economic and social policies guiding vocational education," and asked the question, "How can we make the most of our occupations?"

Vaughn MacCaughy, editor, *Sierra Educational News*, called attention to the ways now provided for boys and girls to "learn to do by doing," as in the Boy Scout movement, the Camp Fire Girls, etc. He pointed out the present tendency in education to take the training and supervision outside the four walls of the school building and apply it in fields of activity.

At one of the general sessions an unexpected guest of honor was introduced, Count Emile Banquet, of the University of Paris, who gave a very interesting discourse, illustrated by charts, showing the correlation between nutrition and vocational success. He then urged all to take advantage of the opportunity provided them to attend the banquet which was to be held that evening.

The banquet was held on the campus, at Stephens Union, and was attended by over three hundred guests. Howard A. Campion, principal of the Frank Wiggins Trade School, carried off the honors as toastmaster. State Superintendent Cooper discussed certification and credentials as they will operate in the future. Dr. Henry Newman from Brooklyn Society for Ethical Culture interpreted vocational education from a cultural standpoint.

Section meetings were held in the afternoons for teachers interested in various phases of vocational education: agriculture, home-economics, commercial, industrial arts, part-time and trade and industrial education; also vocational guidance, and administration, supervision, and teacher-training. All of the section meetings resulted in spirited discussions of vital problems.

Agriculture Education Section

Arthur W. Ross, division of agricultural engineering, College of Agriculture, University of Wyoming, spoke on, "The place of farm mechanics in the agriculture program" before the agriculture education section. At the business meeting the following officers were elected for the coming year: president, E. R. Denbigh of Modesto; vice-president, E. M. Davis of Esparto; and secretary-treasurer, Lee Durham of Ocean Side.

Home Economics Education Section

At one home economics education section meeting addresses were given on food economics, research work, proper clothing for children, and dining-room service; at another meeting the promotional features of the state program of vocational home economics was presented by Maude I. Murchie, chief of the Bureau of Homemaking Education, State Department of Education, and by Richard Allen, State Teachers' College, San Jose, in his talk on "Humanization of the home." The latter speech is reviewed elsewhere in this issue.

Commercial Education Section

John G. Kirk, director of commercial education, Philadelphia public schools, addressed the commercial education section on "Surveys as a determinant in commercial education." Mr. Kirk showed clearly the definite need of surveys in planning commercial subjects to be given in a high school in order to teach the subject needed in the community.

Industrial Arts Section

B. W. Spaulding, director of industrial arts education, San Jose Teachers' College, presented the problem confronted by the industrial arts teacher-training institutions of knowing just what subjects now being taught in the industrial arts departments of other high schools should be stressed in teacher-training courses and which should be considered of minor importance. As a result of a questionnaire study he reported that mechanical drawing was placed at the head of the list with other subjects following in the order given: cabinetmaking, automechanics, carpentry, sheet-metal work, forging, welding, machine-shop practice, printing, battery repair, electrical work, tire vulcanizing and repair, and plumbing.

C. A. Gummere, president's representative, National Automotive and Electrical School, Los Angeles, spoke at two sessions of this section on the theme, "Improved machinery makes men dear, and their product cheap."

The certification of industrial arts teachers was the subject of an address by C. R. Scudder, director of industrial arts education, San Diego State Teachers' College. Mr. Scudder brought out one question, especially, which provoked much discussion: "Do you believe it possible, in a four-year period, to train an individual to a desirable standard of attainment in several branches of the shop subjects taught, and at the same time give him a full academic training so that he may have full standing for an academic graduate degree?"

At the second session of this section, "attitudes, appreciations, and points of views" were given as the

responsibilities of the industrial arts teacher by B. E. Mallery, supervisor of classes for the training of trade and industrial teachers, Division of Vocational Education, University of California; John C. Beswick also spoke, pointing out the future challenge which will be presented to the industrial arts teacher.

Part-time Education Section

At the part-time education section a state-wide organization of part-time education teachers was formed, with an affiliation with the C. V. A. Walter B. Crane, late principal of the Metropolitan High School, Los Angeles, spoke on the joint work on state-wide issues in part-time education by city, county, and state welfare officials. Mary F. Meeredy, executive secretary of the state committee on part-time education, spoke on the subject, "Public education of the employed youth," showing how the part-time laws of to-day are the result of progressive development of protection for the child in industry. Miss Meeredy urged the establishment of a central office in each community where children from part-time school may obtain employment and secure working permits.

At the business meeting of this section, the following officers were elected for the year: Ruth L. Turner, Berkeley, president; John E. Carpenter, Sacramento, vice-president; Irma Bahrs, San Francisco, secretary-treasurer; Floyd R. Love, Stockton, director, two years; Mrs. Margaret Lomax, San Jose, director, two years.

At the Saturday meeting Walter B. Crane dealt with the economic conditions in the United States with regard to employment and the expanded use of the "iron man" in industry. The chief of the Bureau of Business Education, State Department of Education, Ira W. Kibby, spoke of the need for special training as provided in short "terminal" courses, for pupils leaving the full-time schools.

Trade and Industrial Education Section

At the trade and industrial section meetings a number of men from the field of industry were called on to take part in the program. Among these were S. E. M. Jones, educational director, Bell Telephone Company, San Francisco; Eugene A. McCann, manager personnel department, Pacific Gas and Electric Company, San Francisco; and Ben S. Moffatt, supervisor of apprentice training, Caterpillar Tractor Company, San Leandro. Mr. McCann spoke on "Man power in industry"; Mr. Jones on, "What industry expects of a man," and Mr. Moffatt on, "Some difficulties of the apprentice-training program." Other speakers were John C. Beswick and George C. Mann. The former spoke on "The philosophy and economics of secondary education," and the latter talked on "The need of evaluation of the program of vocational education."

Vocational Guidance

Dr. George E. Myers, professor of vocational education and guidance, University of Michigan, and Dr. Margaret M. Alltucker, assistant director, research division, National Education Association, addressed the vocational guidance section. Dr. Myers defined vocational guidance as follows: Vocational guidance includes those activities of the school system which are planned to aid in, and concerned directly with, transfer from school to success-

ful work in a suitable occupation. It includes the following activities:

Occupational information	Vocational preparation
Exploratory exercises	Placement
Information about pupils	Follow-up
Expert individual counseling	

Dr. Alltucker advocated the case system of following up the student through careful and complete records for each student from the time of his entrance in school. The qualities necessary for a successful counselor were dealt with, one of the more important of which was the necessity of holding the confidence of the student as a sacred trust. It should also be the counselor's duty, at all times, to foster the highest type of citizenship and to help the student to envision a nobler life.

A. V. A. Convention in Philadelphia

The convention of the American Vocational Association will this year be held in Philadelphia, December 13, 14, and 15. The convention hotel is the Benjamin Franklin. Make your reservations early! The round-trip fare is about \$200 and the lower standard pullman fare is about \$32.00. Join the A. V. A. now, through the C. V. A. and attend the convention.

Bay Section C. V. A.

The first meeting of the Bay Section California Vocational Association was held at Roosevelt High School, Oakland, California, on Saturday, September 22, 1928. President R. E. Gilbert presided with G. S. Snow as temporary secretary. F. R. Couch, director of vocational training in the Oakland public schools welcomed the members to Oakland. The president then outlined the business of the meeting and the plan of administration for the ensuing year.

The program of the afternoon consisted of a review of the history of the California Vocational Association by John Alltucker, its first president. The summer meeting of the C. V. A. was then reviewed from various angles by different members of the organization. W. A. Patchett, vice-president of the C. V. A., spoke on the general trend of the conference. Mrs. Cora Erwin of San Jose, also a vice-president of the C. V. A., reviewed the meetings of the home economics section. Other phases of the July meeting were commented upon by Cyrus Walker, head of the mechanical drawing department of Polytechnic High School, San Francisco, and by Donald H. Biery, coordinator for vocational teacher-training for the University of California and the Oakland public schools. L. B. Travers, assistant director of vocational education for the Oakland public schools, spoke on the present relationship of vocational education and labor and in defense of part-time cooperative courses.

At the business meeting the organization of the Bay Section was completed by the election of two vice-presidents and a secretary-treasurer. Richard J. Werner, local supervisor of agricultural education, and instructor at San Jose Teachers' College, and R. P. Madeley, instructor in cabinetmaking in Oakland, were elected as vice-presidents, and G. S. Snow of Oakland was elected secretary-treasurer.

President Gilbert then named the committees that were to handle the affairs of the association for the next two years. The city of San Jose was selected for the next sectional meeting after the institute meeting in December. An invitation was extended to the assembly to visit all parts of Roosevelt High School before leaving. The members adjourned to meet at the evening banquet.

First Western Conference on Printing Education

Printing education was the subject of a conference held in Los Angeles during the early part of July in connection with the summer session of the University of California. The conference was sponsored by the Division of Vocational Education, in cooperation with the State Department of Education. Every one in the Pacific Region responsible for better printing was eligible and members came from Oregon as well as from California.

The object of the conference was to consider and discuss the problems relating to education and training in the printing industry for the purpose of promoting better printing. The conference committee consisted of men appointed as representatives of both the printing industry and public education.

The present need for training craftsmen, the standards of selection, and the problems of training from the point of view of the employer were discussed. The responsibility and opportunity of the public schools to assist in promoting the training of printing apprentices, the various types of training, the selection and training of teachers, and cooperation with industry were also topics of discussion. The part-time cooperative plan of training, after an elementary course in the school shop, seemed to meet with rather general approval. The necessity for a close contact between the schools and the printing industry that employers may know the product of the school and that printing instructors may be thoroughly up-to-date in their methods was emphasized by many speakers.

The conference on printing education for the Pacific region was the first conference of its kind ever held in the western part of the country, and plans were made looking toward a permanent organization.

Riverside Houses Built by Boys

By EDITH BRANDEIS

The carpentry class of the Riverside High School, under the direction of E. B. Cordell, teacher of carpentry in the vocational department, built two houses as its units of experience during the year 1927-28. The first house was the residence of A. J. Twogood, instructor in engineering and coordinator for cooperative students in the Riverside Junior College; the second project was a small cottage contracted by four members of the carpentry class, after the spring holidays, to be built in after-school hours and on Saturdays. A factor, recognized by the pupils, in the contracting of this job was the testing of their ability to figure jobs, to bid in the building field, and to do work comparable to that of a building contractor.

The plan of work followed by the carpentry class covered one hour of class work directly related to car-

penry, two hours of school work in classes not so related, and three hours of work on the job. The size of the first project and the varied problems involved in its building afforded much opportunity for work on Saturdays and after hours for those pupils in the class who wished to earn money.



First House Built by Boys' Carpentry Class.

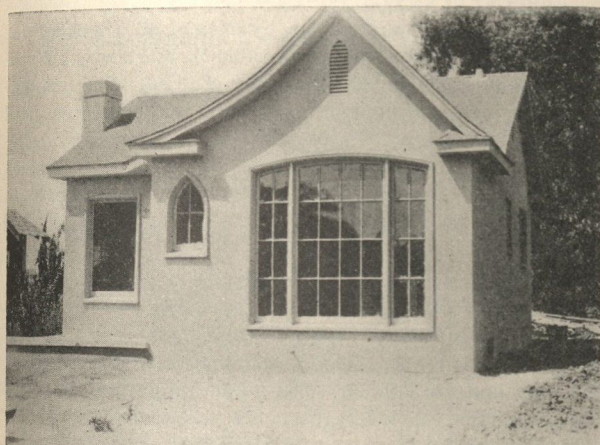
The lot on which the first house was built was on a steep hillside where grew old trees and shrubs. The building was designed and planned by an architect to conform to the hillside. The style of architecture was "early Californian," with adobe-stucco finish, patio, and trim of eucalyptus poles. The house, when finished, was two full stories at the back and one story in front. The floor space was divided into eight rooms for residential use and had, in addition, laundry, sewing room, photographic dark-room, an eight-foot cooler and food closet, and a two-car garage. The insulating of the cooler, the building in of the icebox, the placing of steel for the bank-garage, and the sound proofing of the study offered practical problems in carpentry for the class. The work was inspected by the architect at all stages of construction.

Although the excavation for the large residence was done by men employed by the owner, the class built the forms for the foundation and for the walls of the garage, and placed the steel reinforcements. The concrete was poured by a local contractor. From the foundation to the shingling of the roof, the class did everything that could accurately be listed under the heading of carpentry. As individual workmen, the boys built forms for and poured steps, step-stones, and floors. The double chimney and the two fireplaces were built by the instructor, E. B. Cordell, with the pupils acting in turn as helpers. The plumbing, heating, plastering, and painting were subcontracted by local firms dealing with the owner.

Certain of the pupils who worked on the three-room cottage project were allowed forty cents an hour, others fifty cents, while the teacher, as foreman, received a dollar an hour for his services. The contractors handled competitive bids for the plumbing, the plastering, and the laying of tile. The outstanding features of this compact dwelling were hardwood floors, good fireplace, gum-finished wood in the living-room, bedroom and hall, and

tile in the bathroom. The same quality of material and labor was used as would generally be found in a house of twice its size.

One of the particularly valuable experiences that grew out of this smaller contract was the contact immediately established between its builders and the local representa-



House Contracted for and Built by Group of Boys.

tives of the part-time educational bureau, and also the labor bureau of the state which kept constant surveillance over the constructional activities to make sure that no under-age labor laws were broken in regard to employment.

The wiring of each of these houses was done by the class in vocational electricity under Ralph Ingersoll, as instructor. Under the supervision of H. H. Bliss, a complete series of photographs of the houses was made by the photographic class of the Riverside Junior College. Two of these photographs appear above: one shows the larger residence during the course of construction; the other pictures the smaller project as it was nearing completion.

Soldering

An Instruction Block

By RICHARD H. BEHRENS

The importance of the processes of soldering and brazing is too well known to warrant extended consideration. Archeological finds made on the site of ancient Rome prove that the ancient Romans were familiar with the process of joining metals through soldering. To this day soldering has retained a position of major importance to the worker in metals so that a fairly comprehensive knowledge of soldering and the analogous process of brazing must be looked upon as indispensable to the prospective metal worker.

Just how circumscribed is the knowledge of the average worker of the value and application of various solders and fluxes may be seen from his very ready acceptance of one type of solder (half-and-half) and some favorite flux for any and all purposes of soldering. Such knowledge, no doubt, suffices to meet the needs of the average job of soldering where no stringent requirements exist in the matter of strength, ease of manipulation,

and economy. A more complicated job which exacts a more refined knowledge of the materials and processes to be used cannot be met by the worker who possesses merely a single, average response.

Thus, for jobs requiring the soldering of copper to iron, or steel to copper, half-and-half solder is, of course, thoroughly satisfactory. If an unusual job arises, soldering a block tin pipe for example, the worker must go beyond his general formula and must know, or at least know where to find, the information that the solder best suited to this job consists of 99 per cent tin and one per cent lead (Machinery's Handbook. Sixth edition. 1927, p. 1380) The worker should know also that the best flux for this job is not sal ammoniac to which he may be accustomed, but chloride of zinc. He may even find it necessary to prepare this solder for the job in hand. Again, where soldering jobs are done on a big scale, the elements of economy in material and time may exercise an important influence on the choice of solder and fluxes: thus, according to Machinery's Handbook (Ibid., p. 1381), brass, gunmetal, and copper require a solder consisting of approximately one-third lead and two-thirds tin, whereas iron and steel may best be soldered with half-and-half, and lead with a 67 per cent lead and 33 per cent tin solder, that zinc requires a 55 per cent tin and 45 per cent lead, and that in some cases tallow or rosin is a proper flux, whereas sal ammoniac, hydrochloric acid, and cut acid (chloride of zinc) are more suitable in other cases.

The worker who through innate ability and effective training is able to meet the more unusual demands which the trade imposes may be regarded as working on an optimum level of performance whereas the man who meets routine jobs in routine ways may be considered as working on a minimum level of satisfactory performance. In contrast to the worker at the minimum level, the worker at the optimum level has a certain asset in his background of experience with solders, and in his ability to find and to integrate in terms of new situations knowledge which may be found in books. The man who works at the optimum level possesses *method* to a high degree, whereas the worker who performs satisfactorily without showing any aggressive creativeness in his work has a limited amount of static information; both presumably have developed habits of doing well the jobs of the trade but one has, in addition, developed the habit of thinking intelligently about the facts of his trade.

Two major aims in giving related technical instruction according to the plan here outlined are: (1) to give a background of organized experiences which is, itself, knowledge; and (2) to give a scientific method of meeting problems in the trade.

The following instructional block in industrial science was designed for apprentices working on the cooperative plan in trades in which the process of soldering occurs as a typical operation.

Unit One

The first unit of the block deals with the preparation of common solders. A boy is required to calculate and to weigh out tin and lead corresponding to the three compositions of soft solder: 66 per cent tin, 34 per cent lead; 50 per cent tin, 50 per cent lead; 34 per cent tin, 66 per cent lead. Each combination is alloyed in a ladle over a

gas flame and is afterward poured into battery molds. The boy is now required to determine which of three solders he would select for a number of practical jobs, such as soldering a leak in a copper gasoline feed line, soldering a brass bracket on a galvanized steel tank, etc.

Unit Two

The next unit treats of the process of soldering. This involves the preparation of "cut" acid by adding zinc to muriatic acid until the reaction ceases. While this reaction is taking place the iron is heated after thorough polishing with emery cloth. After heating a piece of polished copper and without treating it further the boy is required to tin a piece of polished copper. In each case he is obliged to record his results.

The next step consists of reheating his iron, and tinning according to the directions of Burghardt (Machine Tool Operation Part I, McGraw-Hill, 1919, paragraph 221, page 264), the iron being dipped in muriatic acid. A piece of copper is now cleaned with emery cloth, some "cut" acid solution applied, and an attempt made to tin the copper. The boy is again asked to compare his results.

The two processes given above are repeated with sal ammoniac and rosin on a brick as fluxes. The pupil is then asked to tin his iron according to one of the methods studied and to apply solder to galvanized iron, using successively, muriatic acid, "cut" acid, powdered rosin, and powdered sal ammoniac. The student is now asked for a comparison in ease of manipulation and strength of adherence of the solder. At this point the boy is requested to repeat on cast iron, steel, copper, and brass the experiment just described.

Unit Three

The influence of scale or oxidation on surfaces to be soldered is then determined by bringing to a red heat a strip of copper. The pupil scrapes the black scale off a portion and is required to explain the phenomenon. He is then asked to attempt soldering on the oxidized copper surface without flux and with the application of "cut" acid and of muriatic acid, comparative observations being required as usual. This procedure is repeated with sheet iron and sal ammoniac flux. A dirty, greasy, and corroded piece of sheet metal is then subjected to soldering with and without flux. Rusty iron is similarly treated.

Comparisons are again made by the student. Certain questions are asked at this point which call for judgment as to the proper procedure to be used when a piece of sheet iron is to be soldered to a piece of rusty pipe, when a leak in a galvanized sink with a white hard-water soap deposit is to be soldered, etc.

Unit Four

The problems of hard solders and brazing are then attacked. Hard solders of three distinctive compositions are made by fusing copper, zinc, and tin in a graphite crucible over a forge fire in the proportions 66 per cent copper, 2 per cent zinc, and 9 per cent tin; 50 per cent copper and 50 per cent zinc; and 70 per cent copper and 30 per cent zinc. The copper is first melted in the crucible with borax flux, the zinc and tin portion being added and stirred with an iron rod. The solder so formed is cast into sticks in battery molds.

By reference to data in Machinery's Handbook (pages 1379 to 1384), and in Burghardt (Part I, paragraph 224, page 265), the pupil is asked to select one of the three hard solders prepared above for jobs such as brazing a broken steel crank case, a broken bed of a planer, a broken brass propeller, etc.

Unit Five

Brazing with hard solder by means of a small torch and fluxes recommended in the table in Machinery's Handbook (page 1381) is the next unit studied. For this purpose two pieces of copper are brazen with the three hard solders prepared by the student. The experiment is repeated with two pieces of steel, copper to steel, and on two pieces of brass. Comparative results in regard to ease of manipulation and ultimate strength are required in each case.

Unit Six

The preparation of aluminum solder in a crucible from 77 per cent tin, 18 per cent zinc, and 5 per cent aluminum is then carried out. The aluminum is melted first and the zinc and tin added. The solder is cast in sticks in battery molds. After reading the reference to aluminum soldering in the Machinery's Handbook (page 1384) the pupil is asked to solder two pieces of aluminum.

Unit Seven

As a final unit the pupil is required to describe the procedure he would use in soldering a number of practical jobs, with special reference to method of cleaning, solder and flux to be used, and application of solder. The following jobs are typical: repairing a cracked aluminum crankcase, soldering a leak in a brass radiator, repairing a cracked mud guard, and sealing a brass pet cock into a rusty iron pipe.

As an outcome of these units, the boy has not only developed a background of information for use in his trade, but has also acquired a method of solving his own problems through controlled experiences with both positive and negative results. He is, therefore, able to make more intelligent judgments in his trade and is approaching the optimum level.

Trade Teachers Are Graduated

Eighty-six men and women were graduated during the past spring and summer from the course for the training of vocational teachers of applied subjects for day, part-time, and evening schools in trades and industries given by the Division of Vocational Education of the University of California in cooperation with the State Department of Education. In Los Angeles, under the supervision of Benjamin W. Johnson, forty-three men and nine women completed the course and were graduated in June. Mrs. Helen D. Atkins and Herman P. Thomas, members of the class made brief addresses. Howard A. Campion, principal, Frank Wiggins Trade School, made the address of the evening; the diplomas were presented by Dr. Ernest C. Moore, director, University of California at Los Angeles.

In Berkeley, exercises were held at the close of summer session for the class which had completed the courses given under the supervision of Benjamin E. Mallary. Addresses were made by Forrest E. Peifer, president of

the class, and by William John Cooper, state superintendent of public instruction. Dr. Walter Morris Hart, vice president and dean of the University, presented the diplomas to the thirty-three men and one woman in the class. All but five of the eighty-six graduates are now teaching.

New Staff in Vocational Home-Economics Teacher Training

By MAUDE I. MURCHIE

The State Department of Education cooperates with a number of institutions in California for the training of vocational homemaking under the federal and state vocational education acts. A number of changes in personnel of the cooperating teachers in these institutions have occurred.

Mrs. Margaret Coyle has accepted the position in the training of vocational homemaking teachers in San Jose State Teachers College left vacant by the resignation of Louise Wood, who held the position for several years. Mrs. Coyle brings to the work a rich background of training and experience. She will teach the child training and parental education group in the home economics department of the college, also the home management project in connection with the day practice apartment and the part-time and adult education course in homemaking. She will also carry the parental work in the city evening high school of San Jose, making it possible to work out a splendid correlation with the college work.

A new position has been created as a cooperative endeavor of the State Bureau of Homemaking Education and Chaffey Junior College at Ontario. Miss Dorothy Shank has been appointed to this position. As a member of the staff of the state bureau, Miss Shank will prepare curriculum material for the various types of homemaking schools, and classes and the Chaffey institution will serve as a laboratory for this work.

Miss Margaret Jones has special charge of recruiting and teaching the vocational homemaking teachers for the course at the University of California at Los Angeles. Miss Gail Burfield, who is doing similar work at Chico, was married recently and is now Mrs. Paul Paulson.

More than sixty experienced homemakers were last year enrolled for the course of training sponsored by the State Bureau of Homemaking Education in the three institutions as follows:

ENROLLMENT OF EXPERIENCED HOME-MAKERS IN VOCATIONAL TEACHER-TRAINING COURSES		
	1926-27	1927-28
State College, Chico	11	9
State College, San Jose	16	26
State University, Los Angeles	30	26
Total	57	61

Courses for the training of teachers of vocational homemaking, aided by the Smith-Hughes fund, are established in San Jose Teachers College, Chico State Teachers College, and University of California at Los Angeles. Some of the special projects at these institutions are:

In Los Angeles, teachers were trained to teach classes of adult women as well as classes of high-school girls. Child-care was emphasized in connection with a course in household administration.

In Chico, child-care was also given in relation to home management and a special course in child-health and hygiene was given, making use of a city clinic.

At San Jose a course in part-time and adult education in homemaking and a project in child-training, with a related project in parental education, were given. The children were present from 10 a.m. to 1 p.m. and the parents came twice a week. A home management project was given, and involved a two-hour lecture course each week and practical work in the practice apartment.

Vocational Homemaking Classes

Part-time extension classes for women in homemaking were organized in 22 cities in California with 347 classes distributed in 201 centers. Ninety different teachers gave instructional service in the work to the extent of over 54 teaching-units of 1000 hours each for a year of 36 weeks.

The number of classes has increased so much that the reimbursement was last year prorated at 77 cents on the dollar. The enrollments for the last two years are as follows:

PART-TIME EXTENSION CLASSES IN HOMEMAKING

	Enrollment	Claim	Reimbursement	Prorated
1926-27	14,349	\$38,863.34	\$32,800.20	.84 plus
1927-28	14,008	39,217.96	30,431.80	.77 plus

ENROLLMENT BY SUBJECTS

	1926-27	1927-28
Dressmaking	5,903	6,595
Millinery	4,945	4,997
Dressmaking and millinery	1,920	1,154
Tailoring	282	358
Business law	93	126
Home art (interior decoration, costume designing, etc.)	368	312
Foods	246	366
Short units	200	100
Home nursing	392	
Totals	14,349	14,008

All-day classes in homemaking during the past year were organized in 19 cities. The 41 classes were distributed in 24 centers and 68 different teachers were employed for full- or part-time service.

The number of classes increased from 33 to 41, and the enrollment from 710 to 894 during the past year.

San Francisco Has Youngest Part-Timer

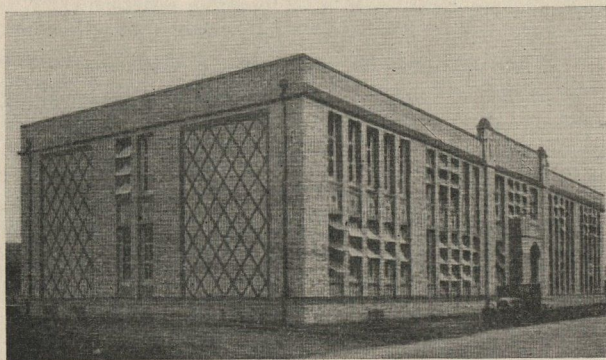
San Francisco Part-time School is proud to have enrolled a pupil who is believed to be the youngest part-timer in the state. The labor laws, however, are not being broken by the new pupil.

Thomas and his mother are both enrolled in the part-time school. The mother has only sixteen years to her credit and Thomas has only six months. Special equipment for the care of young Thomas had to be secured by the class and now he views the teacher through the bars of his crib while his mother takes lessons in homemaking and child-care.

Mrs. Alice S. Beardsley is the instructor of the class attended by Baby Thomas and his mother; other members of the class are all young married girls. Plans are under way for still another class for older married women who wish to learn to deal with the economic and business phases of the home.

Part-time Education

Merritt High. California may well be proud of the fact that another part-time school has been housed in a building designed to meet the special needs of this type of instruction. The Oakland Part-time High School, now known as the Merritt High School, moved into its new building last spring. Oakland is the fourth city in the state to have a new building provided for this purpose.



Merritt High School, Oakland.

Changed quarters. The San Francisco Part-time School is this year housed in a building on Sixteenth and Mission Streets. The change was necessitated by the fire which partially destroyed their building last year.

New principals. Henry O. Dyck is the newly appointed principal of the Metropolitan High School in Los Angeles. Mr. Dyck was vice principal under Walter B. Crane and now succeeds to the principalship of the largest part-time school in the state.

J. Harvey McCammon, who has been director of the part-time school in Pittsburg, has been appointed to the principalship of an elementary school in that city and Joseph A. Power, formerly in the city recreation departments of Berkeley and Oakland, has been elected to fill his place in the part-time school.

Homemakers. The Santa Rosa Part-time High School has a new instructor in homemaking, Helen Stanger. She fills the vacancy caused by the resignation of Mrs. Alice S. Beardsley, who has accepted a position in the San Francisco Part-time School.

Pioneer. One of the pioneers in the part-time-education movement in the state was D. O. Brillhart. He, with W. A. Tenney, organized the Oakland Part-time School and became its first coordinator. Mr. Brillhart has recently accepted a position in the McClymonds School.

OFFICERS OF THE C. V. A.

President—Ralph W. Heywood, 1401 Laveta Terrace, Los Angeles.

Vice-president—Walter C. Patchett, Santa Rosa High School and Junior College, Santa Rosa.

Secretary-treasurer—Dwight M. Rutherford, 501 Western Avenue, Petaluma.

Group Representatives on Executive Council

Trades and industries—Robert Thistlewhite, 1824 Middleton Place, Los Angeles.

Home economics—Cora Erwin, R. 7, Box 424, San Jose.

Industrial arts—James McDonald, 260 South Fifteenth Street, San Jose.

Rehabilitation—E. F. Landon, 1625 Thirty-eighth Street, Sacramento.

Agriculture—V. W. Hoffman, Acampo.

Commercial—R. A. White, Fremont High School, Oakland.

Vocational guidance—Herbert F. Clark, assistant director vocational education, Los Angeles city schools.

Part-time—J. E. Carpenter, Part-time High School, Sacramento.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 3. Bulletin No. 2. An Analysis of Department Store Occupations for Juniors. December, 1920.
- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921. (A revision of Leaflet No. 2.)
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 11. Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 16. Bulletin No. 23. Developments in Part-time Education in California. February, 1928.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

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- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

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- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

NEWS NOTES

- Vocational Education News Notes, v. III, Nos. 1-9, October, 1924-June, 1926 (No. 7 out of print); v. IV, Nos. 1-5, November, 1926-April 1928; v. V, No. 1, November, 1928.

Training Industrial Workers in California

By J. C. BESWICK

Chief, Bureau Trade and Industrial Education

In the brief decade just past we have seen the economic equilibrium of the world re-established. The industrial nations of Europe have risen with renewed vigor and hope. Ambitious to regain or expand their pre-war world markets, not a factor has been overlooked, even to the adoption, wherever possible, of American methods of production in industry by European manufacturers.

Through research and the coordinated efforts of groups of experts, wider foreign markets are being sought as essential to the continued stability and prosperity of American industries. President-elect Herbert Hoover, in his goodwill tour of the South American countries, undoubtedly has laid the foundations for just such necessary expansion of our foreign trade.

"That we are the most prosperous nation of the world, is not only a profound economic fact, meaning greater buying power, steadier production, and better and more regular wages," says Charles M. Schwab, "but it is a spiritual fact of great importance; because of the general well-being of the whole population it means health and happiness and the opportunity for culture." Continuing, he says, "Some of our chief prosperity assets are: highest wages in history in buying power; better understanding and cooperation between labor, management, and capital; improved industrial management and merchandizing; most extensive free school system in the world; and the most general desire for education."

Education, art, literature, drama, music, all intellectual and aesthetic developments make their greatest advance in eras of prosperity. Prosperity, the basis of our general well-being, rests upon the foundation of wealth, which, in turn, is produced from the one and only possible source, namely, the application of trained and developed human capacities to natural resources. In view

of these facts, education and particularly industrial education must be regarded as an essential factor in advancing the economic efficiency of a country or state.

For many centuries the emphasis in education has been placed upon preparation for leisure or for the leisure class. Today we have become an industrial nation; California is fast attaining high rank as an industrial state.

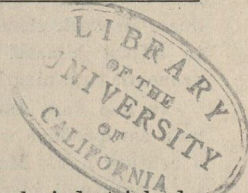
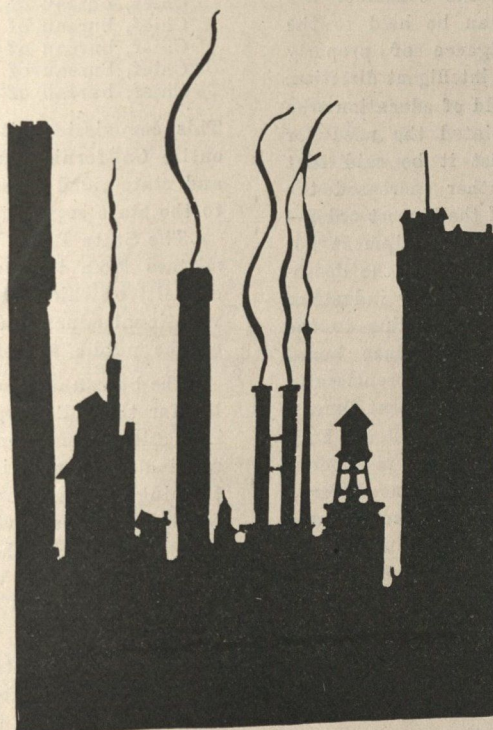
We cannot escape the responsibility and necessity of combining education and labor, if we wish to continue our high wages, high standard of living, and the general well-being of all our people.

Education is a social economy device to avoid the mistakes of undirected learning. Learning is essential to the progress of industrial civilization. As a preparation for life, education must be geared into the needs of life. Education must keep pace with the ever changing industrial and economic emphasis of society, for change is the law of life.

From the history of trade and industrial occupations of the past we know that the occupations, processes, and industries of the future will not be those of the present. In the march of modern industry, there is an increasing need for the application of greater technical knowledge than obtained under the methods of a generation gone by. In order to progress, industry must acquire and apply to economic uses the new knowledge that is being added

by scientific research, discovery, and invention.

Familiarity with the laws, principles, and processes of economic organizations, with the growing technology, and with the economic structure of the present and of the near future, constitutes a large part of the problem of trade and industrial education. In its larger aspect, trade and industrial education is concerned not only with productive efficiency and good citizenship of workers and prospective workers in industry, but also with intelligent,



efficient supervision and management. Let us consider the training of industrial workers.

The aim of the California plan for trade and industrial education is not to develop a mere mechanical worker but rather to improve a human personality, to render him capable of sustained and intelligent effort, equipped to take his place as a worthy and respected citizen of our state. What could be more fundamental to good citizenship than fitting an individual to become an efficient producer in work suited to his intelligence, and helping him to adjust himself to the changing conditions of our economic organization?

In one day, under modern industrial conditions, one man can produce what it took a hundred men to produce a century ago. Mass production is shortening the working hours and increasing the leisure time of workers, a condition favored by management, since leisure time is responsible for many economic demands which help to keep the wheels of industry going. From every point of view increased leisure appeals to the workers, affording, as it does, opportunity for self-improvement through further education and for the "pursuit of happiness" which tends to raise the level of our civilization. Shorter working hours, greater leisure, higher wages, and reasonable cost of industrial products to the consumer are possible if the cost of production can be held to the minimum through skill and intelligence of properly selected and well-trained workers under intelligent direction.

For the uninitiated, some in the field of education who think that mass production has obviated the need for trade skill and technical training, let it be said that modern productive methods have rather increased the need for new skills—a craftsmanship of the highest order—to produce the machines, materials, and equipment for industrial plants and to produce workers for the operation of the plants. New trades and even new industries have resulted from mass production. According to the estimate of the national industrial conference board there should be approximately one million apprentices in training in the nation's work shops at the present time.

Under mass production, management problems have increased many fold, creating a great demand for managerial and supervisory skill. The ever increasing need for a supervisory personnel capable of forming judgments based on craft training or experience has elevated many men to such positions who have come up from the ranks. The important task of training this personnel in the fundamental principles of intelligent direction is one of the outstanding problems in the modern industrial organization.

Keenly aware of the trend of industry and of the development of foreign trade, the foremost and farseeing leaders of our state are carefully promoting a well-ordered, well-balanced program of industrial development in California not only to provide for the requirements of a growing population with higher standards of living in California, but also to secure for California industries a substantial share of foreign trade. The success of industry is necessary to the happiness of the people, for most material human wants are supplied by industry.

The training of industrial workers must necessarily play an important part in the economic efficiency of our state. The California plan of trade and industrial edu-

cation (Bulletin C3) is sufficiently broad and elastic to fit itself into the social and economic environment. It seeks to contribute to the productive efficiency of the worker not only by developing his capacities as an individual but also by rendering him efficient in cooperating intelligently with the organized efforts of others.

State Administration of Trade and Industrial Education

Any organized program of training requires an administrative and supervisory personnel for carrying out the proposed plan. The California State Board of Education is designated as the State Board for Vocational Education with the superintendent of public instruction as executive officer. As the vocational board, it deals with all matters involving cooperation with the Federal Board for Vocational Education, Washington, D. C.

The state board has set up a commission of vocational education to deal with all problems of vocational education as organized under the federal and state vocational education acts. The chief of the division of city secondary schools is executive officer. The commission personnel is as follows:

- Chief, division of city secondary schools, executive officer.
- Chief, bureau of agricultural education.
- Chief, bureau of business education.
- Chief, bureau of home making education.
- Chief, bureau of rehabilitation education.
- Chief, bureau of trade and industrial education.

This commission sits as a policy-making body for the entire California plan for vocational education (federal- and state-aided classes) submitting its recommendations to the state superintendent of public instruction.

The State Board of Education has, as one of its committees from its own members, a vocational education committee which concerns itself with all questions of vocational education in the State of California as a part of the public school system.

The bureau of trade and industrial education is responsible for the following duties: administration, supervision, inspection, promotion, general field service (schools, labor, and industry), auditing, and research; also for the teacher-training program for the training of trade and industrial teachers and supervisors in accordance with the written contract between the State Board of Education and the Federal Board for Vocational Education.

The California teacher-training program in trade and industrial education is provided for in a written contract between the regents, dean of the school of education, University of California, and the State Board of Education. The teacher training is administered through the director of the division of vocational education, University of California, in the school of education, with training centers at Berkeley and Los Angeles, conducted by the supervisors of teacher training and their assistants.

Local Administration

According to the California supervisory plan, local supervision of trade and industrial education may be provided as follows:

A. The bureau of trade and industrial education may arrange with local high-school districts for the employment

of a local supervisor of trade and industrial education, paying part of the salary according to contract from the teacher-training fund of the state.

B. The local board of education may appoint a supervisor of trade and industrial education who spends one-half time in supervision and one-half time in coordination and trade-technical and related-technical instruction in approved federal- and state-aided classes. Under this plan the bureau of trade and industrial education recommends the reimbursement of the district for one-half the coordination cost and one-half the instruction cost of the trade-technical and related-technical subjects. Such a plan may make it possible for a local high-school district to appoint a supervisor, when the teacher-training fund may be already apportioned.

C. Local supervisors and directors of vocational education may be appointed in communities where the local boards of education bear the entire cost of salary.

The duties of local supervisors may include supervision, inspection of federal- and state-aided classes, promotion, foreman-training conferences, and improvement of teachers in service.

One of the most outstanding contributions to effective trade and industrial education is the development of the plan of local supervision, which provides leadership where it is most essential if our program is to keep pace with the changing conditions and with growth of industry. Sufficient proof of its value is to be found in the outstanding progress that is being made in those communities which have established local supervision in trade and industrial education.

Plant Training

In view of the fact that the major portion of all training of trade and industrial workers in industry is acquired in production within the industry itself, it is most important that industry give definite attention to organized training as a most essential factor in the efficiency of production.

Any educational device which will enable the worker in industry to reach his maximum (working) efficiency level in minimum time, and attain good plant citizenship will make him an asset to himself, to industry, and to society and should command the most serious attention of industrial management.

Plenty of emphasis and effort have been directed to perfecting the mechanical engineering phase of industry, perfecting the plant, the equipment, and the materials while the problem of "human engineering" has lagged far behind. Very little has been done in this phase. True, there seems to be a general awakening to the fact that there is a problem and that some solution is needed. This situation should challenge the initiative of local leaders in trade and industrial education to arouse the attention of management in industrial plants in their communities to the importance and value of organized training, and to extend their educational service to the plant and to its workers.

The various types of plant-training are:

I. Advanced training for industrial leadership extension in character

II. Training given mostly under plant supervision and control for:

- a. Employment
- b. A specific job (within the industry)
- c. Retraining of workers due to changes within the industry
- d. Efficiency upgrading
- e. General education of workers (for which the plant may or may not be responsible)

III. Training given in cooperation with the local division of vocational education in cooperation with the bureau of trade and industrial education.

- a. Trade extension (apprenticeship)
- b. Cooperative part-time
- c. Evening school trade extension
- d. Foreman training.

Leadership course.—Keen competition for foreign and domestic markets has developed the need for the highest type of leadership in industry, both management and production. The problem of the elimination of waste of both man power and natural resources is engaging the most serious consideration of our business leaders. Special research studies made by the Federated American Engineering Societies of six major industries showed an average of practically 68 per cent of the waste due to management.

Industry	Per cent of waste due to:		
	Management	Labor	Outside causes
Building trades.....	65	21	14
Boot and shoe.....	73	11	16
Metal trades.....	81	9	10
Printing.....	63	28	9
Mens' clothing.....	75	16	9
Textiles.....	50	10	40

Standardization, coordination and more scientific management are being used as the means of eliminating the waste.

An educational program of an extension character for the training and upgrading of executives and sub-executives in industry who are concerned with plant-control, the setting of production standards, inventory control, routing of material, power loads, most efficient types of machines, cost accounting control, production processes, market outlet and the like, could be given as an advanced course for leadership in industry through the Division of Vocational Education utilizing the services of professors and instructors from the departments of commerce, business administrations, science, and engineering of the universities and from industry.

Recruiting for this type of industrial education would be made from the personnel of a plant or group of plants, executives, and sub-executives, superintendents, engineers, or others especially qualified. Many who have advanced from the ranks to key positions in industry could profit by such a course, in broadening their outlook and giving them a better understanding of the entire organization and their relation thereto. Such work could be given through university extension and special summer school courses.

(To be continued)

A Problem in Trade-Training

By RICHARD H. BEHRENS

Well known to all educators is the unprecedented development of vocational education within the last ten years and the real conquests made by workers in this field; familiar, too, is the knowledge that those who are on the front in this movement see still greater developments ahead. As yet, these developments are not definite, since their realization depends upon a multiplicity of important factors, among which expense is not the least. Whatever progress has been made has come about through the individualization of the program; and it is safe to predict that future progress will be made only in so far as the boy or the girl becomes, to an even greater degree, the focal point of the educational process.

Communities may be justly proud of the well-organized programs now being offered in the several building trades and a few of the manufacturing occupations; viewed as a step in educational progress and community enterprise these programs are remarkable, but for the boy who does not feel drawn to any one of the trades and who is faced with an immediate choice of occupation, or whose choice is not included in the few fundamental trades offered, these training programs must remain fairly indifferent. The boy who wishes to become a butcher or a baker will find only in the largest vocational schools the same number of opportunities that are offered to the boy who is entering the building trades or the few manufacturing trades in the vocational department in communities of average or slightly more than average size.

Placement programs operated in connection with vocational training have shown the advisability of limiting the size of classes in the various occupations to such numbers as may be readily absorbed by the industrial needs of the community. Such a procedure must, of necessity, mean a corresponding diversity in the training program if it is to grow and to serve the community as a whole. A study of the demands of various occupations will show that training in a large number of occupations, not hitherto taught in the schools, may be provided without perceptible increase in accommodations, supplies, or teaching force. Such a plan is particularly feasible with boys working on a cooperative basis or outside of regular schools at the occupation in which they are receiving related training in school.

Jerry's case will illustrate the point. During his attendance at school, Jerry was employed after school hours in a local butcher shop. His duties included meat-cutting and waiting on customers. He showed distinct apathy toward the work of the vocational shop in which he was a pupil. Attempts at adjusting his needs to other vocational shops proved unsuccessful, as did efforts to correlate his science work with the jobs he was doing in the shop. Finally, a determined effort was made to capitalize the boy's interest in meat-cutting.

As a basis of a course, problems arising out of the daily work of the boy in the meat market were made the nucleus about which the instructional matter should revolve. The boy was asked to outline various units of his work in the meat market, and the related work was

selected from this analysis. Although the related work was largely scientific in character, a certain amount of drawing and arithmetic was also given. Drawing was used in laying out on paper the various cuts of meat on the carcasses, and mathematics was used in making change, in weighing, and in other calculations that arose in the day's routine. Of the projects involved, a study of the structure of meats by means of low-powered microscopic sections was made, and also a study of the keeping qualities of meats under different conditions of temperature and preservation. In addition to the laboratory work, reference material, including textbooks on meat, trade publications issued by meat packing concerns, and bulletins issued by the state department of agriculture was extensively used.



DEVICE FOR SMOKING MEAT

To introduce the subject of meat preservation, and to establish a receptive attitude and background for the further study of this subject, a project was developed and carried through by the boy. This project was typical of several used in the introduction of the different phases of the studies which were carried on. This project is described in detail.

Three meats were selected for smoking: pork, beef, and mutton. The initial step in the curing process was the rubbing of fine-grained salt into one-half pound pieces of each kind of meat. These pieces were then packed into small jars, with a layer of salt on the bottom and a

layer on the top of the meat in each jar. After standing overnight, the collected serum at the bottom of the jars was poured off. A brine was then made of one-half pound of salt, two ounces of sugar, and one-eighth ounce of saltpeter dissolved in one quart of water. This was poured over each piece of meat. After soaking for three days the brine was poured off into another vessel and returned to the meats after they had been removed and repacked in the jars. After six additional days of soaking the cured meats were removed from the brine and soaked in fresh, tepid water for one-half hour preparatory to the final step of smoking.

A smoking cabinet was made, as shown in the accompanying illustration, of an ordinary box about 20" x 14" x 12" in size. All cracks were closed with battens and a small, hinged door, to give access to the interior, was provided in the upper side of the box. Three hooks were screwed into the top of the box for holding the meats in position. The heating device for controlling the produc-

tion of smoke was made of nichrome resistance wire wound about a fire brick sufficient to produce a red glow when the current was passed through it. The brick was notched at its edges to hold the wire in position and was held three inches above the bottom center of the box by means of two additional bricks. Pieces of oak wood were placed on the bare wire and the current was turned on. As soon as vigorous smoking took place, the meats were strung to the hooks. The smoking process was carried on for ten hours, a good concentration of smoke being maintained by plugging the heating device into the circuit whenever examination through the opening showed the smoke to be decreasing.

The smoking process completed, the meats were weighed and the percentage of loss, due to smoking, calculated from the weight thus obtained compared with the weight of the raw meats. Each piece of meat was then cut and the comparative quality judged on the basis of texture and flavor.

What Is Business Education?

By IRA W. KIBBY

Chief, Bureau of Business Education

In developing a program of business education in California, it is first necessary that the school administrators and commercial teachers of the state have a fairly definite idea of what business education is—its place in the educational program—and then to come to a common understanding as to its aims and objectives. The writer, therefore, thought that it would be pertinent to open a discussion on these topics. The first discussion will be on "What is Business Education?" This topic will be followed in future editions of the Vocational Education News Notes by later discussions on the other two subjects. It is hoped that the commercial teachers of California will contribute to this discussion by sending in their opinions on the topic and their reactions to the material published for presentation in later issues of the "News Notes."

Commercial Education Defined

The term "business education" is sometimes used synonymously with the term "commercial education." The writer is of the opinion that "business education" has a broader connotation than "commercial education," as will be explained in the discussion, and has, therefore, used that term. Inasmuch as many writers have used the term "commercial education," that term frequently appears in the article and in most cases is synonymous with the term "business education."

There seems to be no unanimity of opinion as to what commercial education is. Herrick says "Commercial education is that form of instruction that both directly and indirectly prepares the future business man for his calling." Monroe, in his *Cyclopedia of Education* says, "Commercial education is now generally understood to include all education which prepares specifically for business careers." I would ask, however, what about the stenographer, the bookkeeper, the time clerk—are they not

business men? It may be that they will become business men or women (many will not) but did the education that these individuals received in a secondary school prepare them for business or did it prepare them for their immediate job? Will not the experiences obtained on the job, with further study, prepare them for their business careers, providing they enter upon business careers?

J. O. Malott, specialist in commercial education, U. S. Bureau of Education, says the term, "Commercial education is used to include that education and training that specifically prepares for an understanding of the relationships and the performances of activities in business." Lomax, in his recent book "Commercial Teacher Problems," says, "Commercial education is fundamentally a program of economic education, and as such has important relationships with all major objectives." Watson, in his "Cyclopedia of Education" admits that commercial education is very difficult to define. He says, "It is difficult to give a true definition of commercial education. In the early days of its appearance it consisted of the study of shorthand, typing, bookkeeping, and related subjects, the aim of which was to provide boys and girls with the means of acquiring knowledge that could be immediately applied to their daily uses." He furthermore states, "The basis of commercial education is political economy and the chief province of political economy is study of business life." All of the writers seem to agree that commercial education has to do with business.

What is Business?

According to Webster's dictionary, business consists of any work, pursuit, or occupation that an individual may be carrying on. This is too broad a meaning. Morris A. Briscoe says, "Business in the broadest sense includes all forms of economic activity directed to the making of a profit. This includes the production of unmaterial eco-

conomic goods as well as material. The lawyer's or doctor's practice must be considered as business in the same sense as a factory producing material goods or a grocery store selling groceries." But does this mean the lawyer's secretary? She is undoubtedly producing unmaterial goods, but is her work directed to making a profit for herself or toward earning a wage? Brisco, however, later states that, "In the business world it is customary to give to business a narrower meaning and to confine it to those economic activities directed to the creation of utilities in material economic goods." In order to create utilities in material economic goods, labor and capital must be brought together in some combination. The activity of bringing these together for the purpose of making a profit constitutes business, and one who brings them together or assists in bringing them together is following a business career. This is the managerial side of business.

Historical Development of Business Occupations

The exchange of commodities has always been an institution of civilized man. First there was the simple exchange of one commodity for another, then there was the introduction of a medium of exchange, rather crude at first but as business needs increased there developed a refined medium such as we have today; then, in modern day, came the introduction of the instruments of credit. With the increase of population man migrated to other lands and the exchange of commodities became more intricate. A division of labor was a necessity. The trader and middleman evolved.

As trade increased, because of the expansion of production and the opening of new countries and thus new markets, better devices were needed to handle the more intricate problems of commerce. The business of production became closely allied with commerce. It needed better and more effective means of marketing. Improved transportation, warehouses, wharfage, wholesalers, jobbers, retailers, banks and brokerage houses, the whole machinery of credit, investments, and insurance came about through the demands of the business of production in order to facilitate the exchange of commodities.

Prior to the industrial age the business of production was largely conducted by the single proprietor. He bought his raw material, made this up into the manufactured article in his own shop, with his own tools, and sold the finished product to the consumer. He was buyer, manager, bookkeeper, clerk, laborer or artisan, salesman, and banker, all in one. Manufacturing and business were simple processes. The division of labor in this field had not as yet developed.

The domestic system followed the handicraft period and the middleman entered the picture. He bought up the raw material, sold it to the artisan, and then bought the manufactured articles and disposed of them to the trade. Thus new occupations developed by commerce took over part of the work of the artisan. Society could be served better by such a division of labor. New jobs were created, new occupations evolved, and knowledge as to how these jobs could be performed best, developed.

The invention of machinery, which brought about the present industrial era, completely changed the system of production. The factory supplanted production in the

home and in the small shop. This system demanded types of specialized workers and a minute division of labor. The managerial side of this new institution became a necessity and took on the function of administering and directing the profit making. The artisans, along with other workers, became machine and tool operators, thus industrial workers. The output was concentrated and the middleman of early commerce days was no longer needed. A sales organization under the direction of the management took his place. Thus we have on the one hand the industrial worker, one who must understand the machines and tools of production, one who must become skilled in the operation and use of those tools; and on the other hand, the managers and directors of the invested capital, the ones who are responsible for the profit making. They must have their organization of co-workers, of buyers, of stenographers, of clerks, of bookkeepers, of stockkeepers, of salesmen, of technical experts of all kinds. This organization conducts the business side of an institution. The subordinate occupations developed by this managerial organization are business occupations. The managers and assistant managers—the real directors of profit making—are following business careers.

This same type of organization has become a part of all profit-making enterprises, including transportation and commerce. Because of the profit-making objective and the newer type of organization all such institutions are known as business enterprises.

Business dovetails with commerce. One relies on the other. Business includes the functions of commerce but commerce is not inclusive of all business. Business is the more inclusive term and should be used to denote those occupations developed through the managerial and exchange functions of our institutions.

With each expansion came new types of labor, new jobs, new occupations. To follow successfully some of these occupations, a broad knowledge of the whole process of business and commerce is needed; others demand that the individual have specific knowledge, technique, and skill for a specialized task; while some of the jobs can be successfully performed by individuals having little knowledge or technique of a commercial nature. Social understanding is needed to perform any of the occupations successfully. As each occupation developed it contributed its share of knowledge and technique to the sum-total of information and thus a body of commercial and business knowledge accumulated. An individual entering upon one of these occupations had to acquire the knowledge, skill, and technique needed to carry on the particular process involved therein. In the early days, and in many instances in our present day, the worker obtained this knowledge through the apprentice system, or through experience obtained in working on minor jobs requiring but little business knowledge or skill and then advancing to positions requiring more and more business knowledge, technique, and skill.

After this business knowledge has been accumulated and organized, much of the information needed by the various workers can be obtained in a more expeditious way than by the trial and error method of the apprenticeship system. Courses in business education, therefore, have been developed to train workers in business occupations. Only a beginning has been made. There is still

much to do in organizing, classifying, and systematizing the valuable knowledge that has been developed through these occupations. Thus the exchange of commodities, known as commerce and the business of production, has developed from a very simple process to a most complicated institution. This development has necessitated the division of labor and the creating of many occupations within this field, the performance of which demand an understanding of the technical processes and knowledge developed by that occupation. Thus came the development of business occupations.

Business Knowledge Contributes to Our Social Life

Although the needs of business resulted in the creation of new activities, which in turn brought into being a body of business knowledge, methods, and technique, society says that business shall not retain all of this for its own use. This knowledge becomes a part of the social heritage of the people. It influences their behavior in situations other than business and should be used wherever it can function to society's interests. In some cases the whole occupation has been adapted to use in other situations. In other instances just fragments of knowledge have become the common practices of many. For instance, stenography and typing developed because of the needs of business, but today stenography and especially typing are used by many who cannot rightly be classified as following a business career or a business occupation. Banking and banking institutions developed because of the needs of business but today a large part of our lay population deals with banks and should know something of the functions of such institutions. Credit developed because of the needs of business but today it is used by the laymen and they, in turn, should know something about the instruments of credit.

Business knowledge has thus become an important factor in our economic development. It is fast becoming an important part of our social life. It has become a part of our acquired power which we should hand down to posterity. Any part of our acquired power that helps sustain society in its continued existence and growth should be studied: first, intensively by those who are going to be engaged in a business occupation or activity so as to acquire the knowledge, skill, attitude, and technique necessary to pursue successfully their chosen calling; and, second, extensively by those who can use such knowledge incidentally in their life activities.

Conclusions

The managerial activity of bringing capital and labor together and the disposing of the product for profit making is called "business." This activity created a body of business knowledge and techniques which, functioning in its proper relationships, brought about many new occupations. These are known as business occupations. The knowledge and technique needed to perform such occupations must be passed down to each succeeding worker if he is to perform his task efficiently and effectively. Some of this knowledge and technique has become adapted to function in social situations other than business and is fast becoming a necessary part of the knowledge that should be acquired by a large part of our population.

Business education, therefore, is that controlled process of imparting business knowledge to:

1. Those who expect to engage in a business occupation or an occupation utilizing knowledge developed by business or by a business occupation, so that the individual may acquire that knowledge and technique, and develop the skill needed to carry on successfully in his chosen business occupation.
2. Those who expect to follow a business career so that they may acquire that knowledge and technique needed to become successfully established in a business occupation with promotional possibilities, and such other knowledge and technique as will make promotional opportunities leading to a business career possible.
3. Those who desire to acquaint themselves with certain phases of business knowledge and technique and to develop such business skills as may function in their social activities as workers and citizens.

Research in Commercial Education

A few of the many studies that are being made by the commercial teachers of California are listed below:

Albert E. Bullock, supervisor of commercial education of Los Angeles, is doing some interesting work in testing.

Modesto recently made a community occupational survey and has reorganized the commercial curriculum based on the findings of the survey.

Ralph Rice of the University High School of Oakland, has been doing experimenting in the teaching of book-keeping.

Miss Lillian Rivers recently made a survey of the graduates of the Fullerton High School with interesting results.

OVERG, DAVID L. *Commercial and Industrial Contacts for Pupils.* An article in the May, 1928, number of *The Balance Sheet* describes, under the above title, a series of visits to the business offices of commercial and industrial plants, arranged for commercial pupils in the Santa Cruz High School. Visits to stores, banks, offices, manufacturing plants, and other business offices served to interpret to pupils studying commercial work the real nature of business. These visits and their results are described by Mr. Oberg.

Social Work Conference Meets in San Francisco

The fifty-sixth meeting of the National Conference of Social Work will take place in San Francisco, California, June 26 to July 3, under the leadership of Porter R. Lee, the president, who is director of the New York School of Social Work. The conference is open to any one who wishes to attend. It brings together at one time the most important group of experts in the field of social work in the country. Its program deals with child welfare, community life, delinquency, health, immigration, mental hygiene, and similar social problems. Thirty kindred organizations will hold meetings in connection with the conference.

All railroads offer tourist rates, with special arrangements for vacation trips. Adequate hotel space has been assured. Additional information about the conference can be secured from Howard R. Knight, general secretary, 277 East Long Street, Columbus, Ohio.

Evening School Classes and Special Classes in Agriculture for the Out-of-school Farm Boy

By JULIAN A. MCPHEE

Chief, Bureau of Agricultural Education

There are unlimited possibilities in the rural high schools of the state for rendering service through agricultural instruction to the adult farmer and the out-of-school farm boy. This work is being promoted more and more throughout the country in connection with the departments of vocational agriculture. With the improvement in the type of agricultural teacher the work in California has grown steadily. Farmers are recognizing their opportunities to secure aid and leadership from the high schools of their districts.

There is a distinction between the work sponsored by the agricultural extension service, through the land grant colleges, and the organized instruction in agriculture that is advocated in connection with the high schools. The Smith-Lever Act, which makes possible the existence of the agricultural extension service in the land grant colleges, was passed for the purpose of extending to the farmer, by means of demonstration, information gained in the state agricultural experiment stations and the United States Department of Agriculture. The work that is being sponsored in connection with the high school agricultural program is for the purpose of carrying on organized instruction for those who are farming or who are preparing for the occupation of farming.

Great care must be taken in organizing a course in agriculture for the adult farmer or the out-of-school farm boy. There are many problems to be considered before courses of this type can be entirely successful.

The suggested procedure to be followed in organizing a course in agriculture for the adult farmer or the out-of-school farm boy appeared in full in the Vocational Education News Notes in April, 1926, pages 13-15. In brief this plan includes:

1. Determining the possibility of organizing a course through personal visits and consultation with the farmers.
2. Outlining the course to fit the needs through the help of a committee.
3. Securing a leader or instructor—preferably the agriculture teacher, himself and assistance from qualified farmers who are specialists in certain lines.
4. Securing the enrollment through personal visits and contracts or agreements with the farmers, and through the help of men in the community who are in influential positions and who come in contact with the farmers.
5. Combining in instruction the lecture and discussion methods, with more of lecture when the group is composed of farmers less experienced in the phase of agriculture being considered, and more of discussion when the group is composed of experienced farmers.
6. Securing publicity through the papers for the announcement of special topics or features and of the success of the work.
7. Following up the work to secure some measure of the success of the course in the practices of the farmers in the community.

Below are the specifications set up by the State Depart-

ment of Education for evening-school and special classes in agriculture for the out-of-school farm boy:

1. An evening-school or special agricultural class can be held in connection with any high school in the state. (Classes may be held anywhere within the district.)

2. The teacher must have a credential entitling him to teach the subject. It is possible under the new law, for a lecturer to give, without a credential, not more than four lectures during a term, provided permission is granted by the State Department of Education.

3. Before being given, each course of study setting up objectives, content, and method of teaching, must be submitted to the State Board of Education for approval. Provision must be made for follow-up or project work.

4. Each course should be at least ten lessons in length.

5. Each high school district is entitled to state and county funds on the following basis:

Four hours of evening school or special classes in agriculture constitutes a day. (This four hours does not necessarily have to be held on the same day.)

A unit of average daily attendance means that a student attends four hours a day for every day in the regular full-time day school for one year. For the first ten units of evening school or special classes in agricultural instruction, the state pays \$80 for each unit for this special work, plus approximately \$30 for the regular attendance that is counted for all classes whether full-time day or special day and evening. The county pays \$60 plus \$40 for the special day and evening school. This makes approximately \$210 for each unit of instruction.

As an example of this reimbursement, suppose a class in dairying was held for ten nights for two hours a night. For each student who attended ten nights at two hours a night, the school would be credited with twenty hours of instruction. This would be equal to five days' attendance. If there were forty students attending each night, it would mean the school would be credited with five times forty, or two hundred days' attendance. If the regular school year for the full-time day school was two hundred days, then this evening school of forty students, two hours per night for ten nights, would be the same as one student attending the full-time day school throughout the year, or it would be considered one unit of instruction. If there were twenty students instead of forty, it would be considered a half unit of instruction, since evening school could only be counted one hundred days. For any fraction of a unit of instruction, one unit of instruction is counted. Therefore, figuring the \$80 and \$30 from the state, and the \$40 and \$60 from the county, this would make \$210 that the school would receive if there were a short unit course for ten nights of two hours each for forty students.

When there are over ten units of instruction for all evening school or special classes in agriculture held in any high school district, the amount of money per unit is less. It decreases again from the twentieth to the thirtieth

units. There is no bonus given when there are more than thirty units of instruction.

6. This money is received the following year. The principal fills out the data on his July report where there is a place for this information.

Homemaking and Vocational Guidance in the Junior High School*

By JEAN DORAN

The junior high school represents an age in education when the ideals that shape a pupil's career are formed. It is a period characterized by instability and restlessness; much physical energy is consumed in the attempt to find opportunities for self-expression. Since individual differences are of sufficient importance to be recognized and carefully considered, this period offers unlimited opportunity for the exploration of the pupil's individual tastes, interests, and capacities. At this period, it is important that the material offered for self-discovery should be "in itself worthwhile" but should, at the same time, serve the try-out purpose.

Take, for example, the homemaking course which is a place for merging the theoretical and the practical. The method of merging should include the detecting, conserving, and developing of individual ability through personal interviews, laboratory work, and try-out experiences.

The home economics teacher should take advantage of the numberless opportunities offered her to vitalize her instruction by contact with the home, through the pupil. She will find that home and school projects, topics for special investigation, part-time work, club work, motion pictures, and extra curricular activities are all helpful in presenting home economics subject-matter and should be used as a means of discovering individual capacities. It is at this point that the instructor will most clearly realize that good teaching presents the guiding principles to the pupil and then allows the pupil to bear the responsibility of proceeding to the solution of her own individual problem.

Subject Matter in the Junior High School Home Economics Course

All girls, before the junior high school age has been reached, no matter what their economic and social level, have lived in homes where the duties involved in maintaining home life held certain common responsibilities. They have seen the process of feeding, clothing, and housing a family; they have seen an income spent, children reared and taught, healthful standards maintained, the sick cared for, and social relationships fostered. Different phases of these duties represent fields of training vital to every human being. The objective in these fields of training embrace one ideal—finer citizenship—with the aim of service.

In the majority of cases, at one time or another, the girl becomes a homemaker. For that reason, training in homemaking has been most popular. Homemaking has certain characteristics which are strikingly different from other vocations. The practice in most vocations is directed toward producing a product which can be measured in

7. All state money must be used to pay teachers' salaries. Sixty per cent of county money must be used to pay teachers' salaries and the rest may be used for other expenses. This money can be used only for special day and evening classes.

dollars and cents. The product of homemaking is the product of the home—human life.

An analysis of the homemaking subjects demonstrates that they are a composite forming a basis for a wide range of very essential vocations other than homemaking. The subject of health in the family stands foremost in the field. A healthful body and mind are the essential prerequisites of proper living. The home has a tremendous influence in maintaining health. While inculcating proper health habits in home economics classes, foundation is also laid for the numerous opportunities that are open to girls who are interested and are able to solve scientific problems. Some of the most attractive present opportunities are: physical education, medicine, surgery, nursing, optometry, dentistry, pharmacy, hospital superintendency, preventive work through dietetics, nursery management, and medical research work.

Allied with health is the subject of food which is one of the most complex problems the human race has had to face. The source, kind, value, cost, care, preparation and digestibility of food in the human system are phases of interesting study which yield an insight into healthful living and which lead to vocations that are open to girls and women.

The subject of clothing, with its numerous problems in relation to art and to the vocations based upon the different phases of the subject, takes a prominent part of the program. Housing the family, with its many detailed requirements, demands subject-matter vital to every one from the home point of view and gives a basis for vocational choice in this field.

The Present Outlook

The outlook for vocational guidance in junior high school home economics is interesting and suggestive of much opportunity for work. With scientific experts, educators, and psychologists giving thought to the organization of training for adolescents that will form a basis for the establishment of better homes and the choosing of other vocations, is it not legitimate to anticipate a decided change within the next few generations?

The movement is too new to forecast its full effect, but surely the next generations will experience greater happiness and less maladjustment in life as a result of better homes and of well-chosen vocations—vocations selected according to interests, abilities, and training. At least, it seems probable that the junior-high-school home-economics courses will make a worthy contribution in forming a basis for choosing vocations and should, in the future, hold their place among the vital subjects of the school program.

*Part of a paper written in course in Vocational Guidance Education 164.

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Part-time Education Homemaking Education
Business Education Vocational Guidance
Agricultural Education Trade and Industrial Education
California Vocational Association

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LAWS FOR WORKING BOYS AND GIRLS

"A Digest of Laws for Working Boys and Girls," which gives the essential school and labor laws was compiled by Virginia R. Hubener of the San Francisco Part-Time High School and published by the Division of Vocational Education of the University of California as Leaflet No. 6 of the Part-time Education Series. More copies are available for use in classes in California schools and may be had, free of charge, by sending request to the Research and Service Center, Division of Vocational Education, 118 Haviland Hall, Berkeley, California.

ROBERT J. LEONARD

Friends and colleagues of Dr. Robert J. Leonard, former Director of the Division of Vocational Education, were shocked and grieved to learn of his untimely and tragic death in New York, February 9. In his passing the profession of education has lost one of its peerless leaders, and vocational education one of its staunchest advocates.

Professor Leonard entered the teaching profession through vocational education, with the development of which he was intimately identified for twenty years, both locally and nationally. Born in California, a graduate of San Jose Normal School, his first teaching was done in this state. From the directorship of industrial and vocational education in the Berkeley schools he went to Teachers College for graduate study. In 1914 he was elected professor of vocational education in Indiana University and for two years thereafter his influence profoundly affected vocational education in that state. In 1916 he became the first regional director of the Federal Board for Vocational Education for trade and industrial education for the Central States. From this position he was called to be professor of education at the University of California in 1917. Here he organized the Division of Vocational Education, and closely cooperated with the late Dr. Snyder in drafting the California law for part-time education. Upon its passage he secured the cooperation of the State Department of Education in organizing a comprehensive program of training for part-time teachers and administrators. His seminars were centers of influence which have left a permanent imprint upon vocational education in California.

At his death Professor Leonard was director of the School of Education of Teachers College, in which position he exercised those rare powers of organization and insight which all who knew him recognized for their true worth. He was the moving spirit in the extraordinarily effective program for training colleges administrators which Teachers College had called him to formulate. He was a powerful force in the movement for adult education. He was continually called upon for counsel in projects whose significance was truly international. His death at the early age of forty-four takes from us one who had already attained great eminence, and whose professional promise was unlimited.—EDWIN A. LEE.

SPACE FOR COMMERCIAL TEACHERS

Space has been set aside in each issue of the "News Notes" for commercial education in order to help coordinate the work throughout the state. The commercial teachers of California will thus have an organ through which they can communicate; give and receive information and inspiration; tell of their outstanding accomplishments; and report on their meetings.

Will the secretaries of the various commercial teachers organizations kindly send the names and addresses of the officers of their organizations to the Chief of the Bureau of Business Education, State Department of Education, Sacramento? We shall be glad to publish the meeting notices and reports of the various organizations.—I. W. K.

President Hoover on Vocational Education

The following letter is of interest in indicating the favorable attitude toward vocational education held by the President-elect.

DEPARTMENT OF COMMERCE
OFFICE OF THE SECRETARY
WASHINGTON

March 30, 1923.

Mr. J. C. Wright,
Director, Federal Board for
Vocational Education
Washington, D. C.

Dear Mr. Wright:

My attention has been called to comments in the press on the increasing cost of education, and more particularly of vocational education in our public schools. Expenditures in the States last year under the Federal Vocational Education Act amounted to less than \$15,000,000, or approximately 15 cents per capita. Of this amount States and local communities contributed in round numbers \$11,000,000, and the Federal Government \$4,000,000. Thus the States and local communities contributed 11 cents and the Federal Government 4 cents per capita of population for the promotion of vocational education under this act. This cost can not be regarded as constituting a serious financial burden upon the community. It is approximately the cost of a medium-sized battleship. Certain indirect costs of this form of education can not be accurately estimated, but in the aggregate they are relatively to our wealth and population insignificant. If vocational education is worth while, certainly as a Nation we can afford the price of such education. Our only concern is to know that it is worth while. If it is, expenditure on account of such education is in the nature of an investment which will yield large dividends from year to year through the progressive increase of labor skill and industrial efficiency.

As a member of the Federal Board for Vocational Education, I have for the past two years been brought into close contact with those who are administering the Federal Vocational Education Act, providing for cooperation of the Federal Government with the States in the promotion of vocational education in our public schools.

The essential purpose of this act is to extend public school education to provide for the needs of our youth who do not enter our higher technical and professional educational institutions. We are accustomed to large expenditures for the maintenance of these higher educational institutions. In some of our state universities the cost of providing education for the professions runs well into the thousands of dollars per student graduated. Vocational training for the commoner wage-earning pursuits and skilled trades is equally as essential as is training for the professions. The humblest worker equally with the youth who proposes to enter the professions, has a right to the sort of training he needs. . . .

Men of affairs the country over are being impressed with the fact that the cost of training labor on the job is one of the great industrial costs, but they know that the cost of inefficiency and lack of training is very much greater, and that labor must be trained whatever the cost.

If they or the community do not provide such training they can not compete with the foreign producer whose labor is vocationally trained at public expense, nor can we as a Nation adequately supply our own needs for the product of labor, if we neglect to provide for the training of labor.

The cost of providing this training is just as properly a charge upon the public revenue as any other form of education. In the interests of labor itself such training can not be devolved upon the employer. Organized labor is perfectly right in insisting that vocational education shall be under public supervision and control, so that the interests and welfare of the worker as well as of the employer will be taken fairly into account. The cost of such training certainly should not be put upon the individual worker unless we are prepared to abandon our traditional policy of providing free education and equality of opportunity for our youth. We can not in fairness continue to provide specialized education free to the few who propose to enter the professions, while denying education to the many for the commoner vocations.

A community must pay either for the cost of training labor or for the much greater cost of inefficiency of labor, and inefficiency of labor means inevitably general industrial and commercial inefficiency.

Further it may be noted that in so far as the products of American labor come into competition with the products of foreign labor, either in our own domestic market or in foreign markets, unemployment for American labor is bound to develop in proportion as foreign labor is better trained and more efficient. No American employer can hold his markets and continue to employ labor, if his labor is relatively unskilled or if his costs for training labor greatly exceed those of his foreign competitors. . . .

Can we expect to maintain our commercial standing in the world's markets if we neglect to train our labor, and if we permit other countries to take over the competitive advantages that superior vocational training will give them?

Having taken the lead in vocational education, we certainly shall not now permit ourselves to slip back because of a notion of false economy. I have been thinking particularly of the service rendered by vocational education in the broad fields of industry and commerce, but the social and economic value of such education is of course equally great in other fields. There is in fact no better economy than the economy of adequate training for the pursuits of agriculture, commerce, industry, and the home. Our youth must enter into these pursuits, and it is in the public interest that they be well trained for them.

To provide such training is clearly a public responsibility. Education in general, including vocational education for the youth, is democracy's most important business. Democracy in education means that in the field of education opportunity shall be extended equally to all—to give all a fair start. This is the educational ideal inspiring those who are administering the Federal Vocational Education Act; it is the ideal which inspired Congress in passing the Act; and it is traditionally the ideal of education in our democracy.

Yours faithfully,

(Signed) HERBERT HOOVER.

Next C. V. A. Conference

The California Vocational Association, in its third year of existence, has shown steady growth. In its second year, alone, the membership exceeded one thousand. Three annual conferences have been held, including the initial meeting at Huntington Lake in 1926; the second of these conferences took place at the time of the American Vocational Association Convention in Los Angeles in December, 1927, and the third conference was held at Berkeley last summer.

With the adoption of a new constitution at the Berkeley meeting, the state was divided into sectional associations corresponding with the sections of the California Teachers' Association. Each of these sections became a working unit with its own officers to promote, within each territory the cause for which the California Vocational Association stands.

In the state association at large, and as represented in the sectional organizations, are groups pertaining to the various types of special educational work in California public schools. These groups are: commercial, home-economics, industrial arts, part-time, rehabilitation, trade and industrial education, and vocational guidance.

In each of the six sections local associations may also organize and affiliate themselves with the district association. In the chain of connections made possible by the new constitution, a local association becomes affiliated with the district association. The district, in turn, connects with the California Vocational Association and the California Vocational Association is affiliated with the American Vocational Association. In this way every person who is a member of the local group and pays the specified dues becomes, automatically, a member of the state and national associations and so derives the benefits from each of these groups. Through the supporting network of large state organizations, strength is developed in the national association. This power, in turn, enables the national association to promote effectively desirable policies, stimulate activity in the various fields of education represented, and publish literature of interest and value to all who are engaged in the work.

This year should be devoted to perfecting district and local associations in the state so that more unified emphasis might be placed on the various phases of school work represented in the organizations. Without strong district organization, the state organization cannot be effective. The value of belonging to a professional organization of this character must be realized by the individual on the job. The district and local organizations may emphasize this value to each individual member by actively engaging in the promotion of good fellowship, professional advancement, and healthy expansion of programs in the school.

The success of the C. V. A. has been due, in no little measure, to the integrity of the two presidents who have been in office up to this time. The first president, John R. Alltucker, of Vallejo, had the tremendous task of promoting the necessary ground work for the organization, and bringing it into a working unit within a limited length of time. The second president, Ralph W. Heywood, of Los Angeles, was elected at a time when the period for permanent development and crystallization of policies was

demanding. Mr. Heywood, also, has met the challenge for association development; this fact is evidenced by the new constitution, and the detailed development that is now taking place through the district and the local organizations.

The next state-wide convention of the California Vocational Association will be held in Santa Barbara on August 12 and 13, 1929, where a large attendance and a successful meeting is expected. The Santa Barbara County Vocational Association has already begun preparation for the pleasure and convenience of the visitors, and is determined that nothing shall be left undone toward making the conference a success. Immediately following the dates for the C. V. A. program comes the Spanish Days Fiesta of Santa Barbara which has become nationally known for its historical and colorful festivities. This combination of conference and fiesta offers an excellent opportunity for a pleasant vacation trip, not only for teachers from California but also from other states. A program of garden tours, entertainments, sightseeing trips, etc., will be added to the splendid program which is promised for the professional sessions. Every teacher should reserve these dates now, and should begin to plan for the next convention of the C. V. A. at Santa Barbara.

The President's Message

Fellow members:

Your president wishes to extend to you, as members of the California Vocational Association, his greeting for the year 1928-29, and hopes that it will mark real progress in the history of the organization. We are organized under a new constitution to present a united front for all vocational groups, and to protect and foster the interests and the professional growth of the group interested in the problems of education for a livelihood.

A new constitution was adopted in the summer conference to create six districts, identical with the California Teachers' Association. Sets of officers who were then appointed are now at work organizing the various districts. Affiliation with the California Teachers' Association was also accomplished without losing our identity. This is a step of progress, for it means that we shall have representatives on the governing bodies of that organization. Too, if we can equal last year's record of a thousand members belonging to both C. V. A. and C. T. A., your president will become an ex officio member of the C. T. A. Council. This body is one which has great influence in state educational matters. The association may then have on this council, to protect your interests, a representative of vocational teachers on problems of certification and legislation.

The term "vocational teachers," as used in our association, means all teachers engaged in training for occupational activities. We hope eventually to attract all teachers of home economics, trade and industry, industrial arts, commercial, part-time, rehabilitation, and vocational guidance into our society so that we shall be a united association with many branches. Eventually we may anticipate a consolidation of organizations and the elimination of so many small ones. Our interests may then be protected by one large association rather than by several small, ineffective organizations.

The success of the Berkeley conference, held last July, was due chiefly to the fellowship and good will which was expressed by all of its members, and because it marked a new step in the growth of this young organization. All groups stood for harmony and the best interests of the association. The success of this conference was due, in part, to the help and suggestions of the State Department of Education, the Division of Vocational Education, University of California at Berkeley, and to the untiring efforts of R. E. Gilbert of Oakland, and his local committee.

The California Vocational Association has been officially invited by the Santa Barbara Chamber of Commerce to hold its next annual conference in that city, which seems a most fitting place because of its central location in the state. Plan your vacation next year so that you may be present to enjoy the fellowship which was expressed at the last conference. Thus, you will know and understand better the interests of your fellow workers from all over the state, and so help to unite our efforts into a real group achievement for vocational education.

Become a member of the California Vocational Association and the American Vocational Association, and be a booster for our interests, and the Santa Barbara conference!

Cordially yours,

RALPH W. HEYWOOD,

President, California Vocational Association.

N. B. V. A. Meets Each Month

The North Bay Vocational Association was formed in 1927 and meets once a month throughout the school year, although it is not a section of the C. V. A. Its object is the exchange of ideas and teaching material, acquaintance with the other members and their work, and discussion of common teaching problems by the conference method. The counties bordering upon the bay on the north are all represented and more than sixty teachers from the schools in this district are in the association. They represent agriculture, trade and industry, and commerce. It is hoped that teachers of homemaking may be added to the association.

On January 12 the association met in Suisun with W. F. Newell as host. The program began with a dinner, at which time John C. Beswick, chief of the bureau of trade and industrial education made an address. An inspection of the new \$15,000 shop building which houses the vocational department of Armijo Union High School followed the banquet. Mr. Newell led the pilgrimage to his well-equipped new building. A round table conference, led by John R. Alltucker of Vallejo, completed the evening's program.

The February meeting was held in Pittsburg. After a dinner served in the school cafeteria an inspection trip to the Columbia Steel Mills was arranged. First the rolling mill, where white hot ingots are rolled into bars and steel shapes, was visited, then the wire drawing mill, nail mill, plate mill, galvanizing mill, and machine shop. The most spectacular sight of all was the tapping off of the 75-ton furnaces, where the steel at about 4000 degrees ran from the furnace like water into the ingot molds.

The arrangements for the meeting were made by R. Boydston, vocational director for the Pittsburg schools.

The association expects to visit various industries including, the sugar mill at Crockett, and the Mare Island Navy Yard during the coming spring. The officers for the current year are: W. H. Hudson, Alhambra Union High School, Martinez, president; George Strieff, Sonoma High School, vice-president; and W. R. Garcelon, Vallejo High School, secretary. J. R. Alltucker, Vallejo High School is conference leader.—W. R. Garcelon.

OFFICERS OF THE C. V. A.

President—Ralph W. Heywood
1401 Lavita Terrace, Los Angeles.

Vice-president—Walter C. Patchett
Santa Rosa High School and Junior College, Santa Rosa.

Secretary-Treasurer—D. M. Rutherford
Petaluma High School, Petaluma.

Presidents of Sections—
North Coast—Roy Good, Fort Bragg.

Northern—C. O. McCorkle
Red Bluff Union High School, Red Bluff.

Bay—R. E. Gilbert
23 Napier Avenue, Oakland.

Central—Thomas M. Testall
1342 Echo Avenue, Fresno.

Central Coast—Charles E. Knott
California Polytechnic School, San Luis Obispo.

Southern—Franklin C. Webber
Belvedere Junior High School, Los Angeles.

Californians Attend A. V. A. Convention

A number of Californians attended the annual meeting of the American Vocational Association in Philadelphia in December: Dr. Nicholas Ricciardi and Julian A. McPhee from the State Department of Education, Dr. Edwin A. Lee and Miss Emily G. Palmer from the Division of Vocational Education of the University of California, L. B. Travers of Oakland, and Miss Laurine G. Broadwell, F. C. Weber, and Ralph W. Heywood of Los Angeles. The 1929 meeting will be held in New Orleans, December 5, 6, and 7.

Radco Repair Manual

Friends of A. D. LaDue, former instructor in auto-mechanics at the Fremont High School, Oakland, will be interested to know that, although he is no longer connected with public school work, he is still in a sense a vocational teacher, as technical editor of the Radco publications. His instructions on automotive repair go to auto mechanics all over the world. He has just completed a revision and enlargement of "Radco," a standard repair price calculator for the trade. This book should interest teachers of automechanics throughout the state as many have found the earlier edition of help in setting time standards for students at work. The new edition, listing 350 operations, serves as an excellent trade analysis.

Mr. LaDue is also the author of a book now in press called "The Radco Short Way Repair Manual" which will contain helpful repair aids and suggestions on 255 car models as far back as 1922. He was assisted by over 500 practical mechanics in making up this book. In the collection of this information and in the editorial work he was aided by three very practical men: Harry Vahlbusch, Samuel Derby, and Robert Hampton.—B. E. M.

Trade Education for Girls Through the Day Trade and Continuation Schools*

By EMILY G. PALMER

Trade education for women has progressed with the development of industrial opportunities for women. It has passed, according to Mrs. Anna L. Burdick, through the following stages:

1. Economic stress forces women into new fields.
2. Society finally accepts their presence as a fact.
3. Private enterprise demonstrates the possibilities of educational training and preparation.
4. Public agencies ultimately assume this service. (Federal Board, 1920, p. 11.)†

Two other stages still will have to develop before industry (i.e., manufacturing and mechanical employment) will become an inviting field of employment for women of ability:

5. Industry will improve its own educational program and training methods.
6. Women will find opportunities for advancement in industry.

In appraising the success of the trade-school movement certain factors must be considered. If girls are being trained for trades in which they cannot find employment or for trades in which they will not accept employment there is great economic loss. If girls are not sufficiently well trained to meet the requirements of employment conditions there is again a loss both to the employer and to the girls. Loss of morale on the part of the worker who considers herself trained for a job and loss of faith in public education arise from such conditions.

A survey of a number of trade schools for girls has shown that the enrollment was made up of girls, from 14 to 25 years of age, whose education ranged from third grade to high-school graduation. It was apparent that they entered the trade school for a variety of reasons, including the following:

Wanted a trade.	Advised by an employer.
Liked to sew.	Too young to go to work.
Wanted skills for use at home.	Had friends in trade school.
Felt too large for grade.	Ill health.

With all of these varied and unrelated aims on the part of the girls it is not surprising to find that, "Less than two-fifths of all who have left the three trade schools have taken up the trade for which they have been trained." (U. S. Department of Labor, 1917, p. 26.) It was also found that the age at leaving school bore a close relation to the use of the trade training, which fact was borne out by the statement, "It is at once evident that the girls who made use of their trades were an older group at the time of leaving school." Seventeen seemed to be the age when girls learned best and were most likely to continue in the trade.

Distressing as these figures must have been to the trade schools which were then in their infancy, it would not be surprising to find conditions only a little better today. Engineering schools, law schools, teachers colleges, and other educational institutions requiring much longer

and more expensive training also find that a relatively large number of their graduates never enter the field for which they have been trained.

One survey showed that the initial wage for the girl trained in the school was higher, on the average, than the wage of the girl entering the industry untrained, but that after a period of time the wages seemed to be about the same. The real economic contribution of the training seemed to be in the initial wage, although the report states that, "There seems some reason for concluding that a trade-school girl reaches her full productivity in a factory in a shorter time than an untrained girl, that is, that her shop training is less expensive to the employer." (U. S. Dept. of Labor, 1917, p. 52.)

This survey was conducted when trade schools had been organized only a few years and a better system of selecting pupils may bring about an improvement in wages which will extend beyond the initial period. The first annual report of the Philadelphia Trade School indicates some of the early problems of the trade school which bear significantly on the evaluation of the work. Aside from lack of trained teachers and proper equipment there was, at first, an unselected group of girls entering the school. The first report of the principal, Cleo Murtland, indicates that pupils in the school may now be classified roughly as:

1. Pupils who wish to learn a trade for the purpose of becoming wage-earners in that trade.
2. Pupils who do not wish to go to high school but wish to remain in school until they are sixteen, when they may be released from school attendance. Wage earning after sixteen is not seriously considered, though probable.
3. Pupils of the so-called "social case" type, who have no particular aptitudes and abilities, whose desire to work is real, but ambition monetary and immediate, pupils to whom evasion of school attendance has become a habit."

"Of the groups designated, one and two outnumber the third; but considering the work involved, the third group (the 'social case') seems very large. . . . The work of this group is considered as part of the experimental work of this school."

This school also reports that, "Graduates of the trade school receive a higher initial wage than untrained girls entering the same occupations. This protection does not last over more than a year at present. Beyond this period trade school graduates have to compete with untrained workers."

"The chief reason for this condition is that in the trades for which training is offered, untrained workers greatly outnumber trained workers. Then, too, workers trained in the trade school have to compete with women trained in the business establishment. The former are young girls; the latter, for the most part, are mature women. These inequalities of competition within a given field of employment, though little recognized, make for hardships for the young worker who must attempt to measure up to adult standards of responsibility and workmanship, and for the older woman, who, with standards

* This first installment of this article appeared in the November, 1928, issue of the News Notes.

† The complete reference is given at the end of this article.

of workmanship established, must live down (or approximately down) to wage standards of the young worker whose financial responsibilities are usually less heavy than those of the older woman."

More encouraging are the recent reports of the Boston and Manhattan trade schools that practically every girl who completes her training can be placed immediately. The principals of both schools have stated that they have more requests for trained girls than they can fill.

In the twenty-five years since the establishment of the first trade schools for girls the older trade schools have reached a point where they can place all of the limited number of pupils whom they train. It is indeed wise that the trade school movement should not be pushed beyond the point of demand.

The Future of Trade Education for Girls

The opening of better opportunities to women in industry, as has been said before, will come only when industry is able to attract more capable women into its ranks. The development of trade training is dependent upon opportunities for advancement before it will have as important a place in the education of girls as commercial training now holds, for example: the Manhattan Trade School has in mind one enterprise looking toward this goal. A tea room is conducted which is financially profitable to the school, and furnishes the supplies to the department of foods. It also has a ground floor store where clothing, lampshades, and novelties made by the girls are shown for sale. So successful has been the financial side of these two departments that Miss Marshall, the principal, hopes to create a fund to be used in helping girls, trained in her school, set up small establishments for themselves. The business training in buying and selling will be provided and girls will have the expert counsel of the school while they are launching the new business. This will give a direct line upward for the girl in industry, and thereby create a more wholesome attitude toward this whole field of work for girls. Trade education for girls can be expected to take a new and long step forward when such an outlet becomes possible.

Trade Education for Girls Through the Continuation School

Along with the trade training for girls in the full-time trade school there has developed another movement for the education of young people just entering employment through the part-time or continuation schools. Continuation education is compulsory for minors under sixteen, seventeen, or eighteen years of age (depending upon the regulations of the state) if these minors are no longer attending full-time school. For four or eight hours a week, again depending upon the legal provisions of the state, boys and girls attend day classes during the hours of employment.

To Ohio belongs the credit for the first state law recognizing part-time education for minors, through a permissive law which was passed in 1910. The passage of the federal Smith-Hughes act in 1917, giving federal aid to states for continuation as well as other forms of vocational education, again stimulated the passage of part-time-education acts. Eleven states passed compulsory part-time-education laws in 1919, five in 1920, and seven in 1921.

The Aims of the Continuation School

The earlier aims of the part-time or continuation school were quite definitely for an extension of trade or other occupational training according to the plan of the German schools; but it was soon found that not all boys and girls left school to learn a trade or to enter employment. Teachers discovered that all kinds of problems, other than vocational, were found among pupils who left school before completing the secondary-school course. When Dr. Hopkins made his study of the intelligence of continuation school pupils of Massachusetts, he found that early withdrawal from school was not caused chiefly by economic necessity, nor by the desire to go to work, but by the inability of the pupils to do the work of the regular school. (Hopkins, 1924, p. 107.) It is undoubtedly true that inability of the pupils may be due to maladjustments of all kinds, physical, mental, and social, which lead to failure and dropping out of school soon after the legal minimum age. The compulsory continuation school, therefore, falls heir to these problems.

The Department of Education of New York State called a conference on the education of employed youth in 1927. Dr. Strayer, at one of the sessions of the conference said, "So the primary function of a school that permits boys and girls to come for four hours a week is to discover what they can do, and to give them that guidance which will send them in the direction of their greatest achievement." At another session Dr. Mary H. S. Hayes, who heads the Vocational Service for Juniors in New York City, and who knows the boys and girls seeking employment as few others do, said, "Let me give you my answer in a single sentence. *The continuation school is only incidentally an educational institution.* It is primarily for guidance and supervision; guidance and supervision in health, in recreational and social activities, and in obtaining further training; guidance and supervision in providing vocational information as to opportunities and conditions of work in various lines of industry, in the responsibilities which these young people assume when they cease to be school children and become wage earners, in the training required in various lines of activity and how it may be obtained and, last but not least, guidance in obtaining for them work on investigated jobs and a follow-up of their progress on these jobs." (Univ. of State of New York, 1927, p. 100.) When the continuation school has accomplished this purpose for the girls it may then concentrate on the problem of vocational training.

Guidance, however, cannot be given in a vacuum. It must be given through experiences in which the pupils participate. Guidance as well as training through some phases of commercial work in the continuation school has been particularly successful if the pupils were employed in clerical work. The same may be said of the courses in domestic work for girls who were employed in homes, and courses in home management for young married girls.

Trade training for girls has scarcely been touched as yet in the continuation school. Ideally the part-time school should have a better opportunity for supplying trade training for girls than the regular day trade-schools. Girls who are employed in the various industrial plants are acquainted with factory conditions and standards; they should be able to see the value of the work being given them; and they can bring to the school each week

such problems as they have met in their work. Experience in this work presents other problems, however. In the first place, employers have not been convinced that the school can give industrial training to girls. The personnel manager of a large candy company in Boston, for example, reported a splendid plan of cooperation with the continuation schools of that city, by which every new girl entering the employ of this company goes to school half time. The company believes thoroughly in education. "Our prosperity," said the manager, "is directly proportional to the ability of our people to think intelligently." With this excellent attitude toward education in general, he holds quite a different attitude toward specific training by the school. He said, "In the beginning we were asked if we had any ideas about what should be taught in these classes. We had one very definite idea, which was that the candy business should not be taught in so far as such instruction would touch the actual operations performed by the girl." (Neaves, 1928, p. 322.)

Sometimes it is the girl, herself, who does not desire training related to her work. Either she is in the factory only until she can get another job, or she is employed in some operation so simple that further training seems unnecessary, as in soap wrapping or packing of hair nets. Some girls wish to prepare for clerical positions and elect typewriting or filing, or they may merely wish to spend the time learning some skill which will be useful to them personally: dressmaking, manicuring, and art novelty work are especially popular as avocations. Many continuation schools anticipate these latter choices and offer to girls in industry only commercial work or some phase of home economics or personal hygiene.

Not only have employers and the girls themselves not encouraged trade training for girls through the continuation school, but the continuation schools have rarely selected for their teaching staff women who have been trained in the local industrial plants. Instructors for boys, on the contrary, are often selected for continuation schools because they have been excellent foremen in the industry for which the boys are desiring training. May this not be one explanation of the failure of the employer to trust the school to train the girls in his employ or of the girls to select courses which are related to their work?

The Opportunity for Trade Training in the Continuation School

It would seem that if the continuation school is to have a distinctive part in the trade-training of girls it should begin with the trades which are not usually considered by the full-time trade school. The related instruction in the trades for which the school could not hope to duplicate the industrial equipment are the special field for the part-time school. The problem of industrial relations which forms so large a part of the maladjustment in employment is also a responsibility of the part-time school.

There is every reason to believe that the continuation school is in a position to help push the barriers for women a little farther away by conducting definite research and experimental investigation in the field of industrial employment for girls. They have the opportunity of placing a girl in a position of responsibility in a factory and with

the cooperation of the plant and of a teacher who knows her problems through experience help her to succeed by studying the job with her and giving her counsel as she needs it. Experiments of this kind might demonstrate the possibilities of industry as a desirable field of employment for women.

Better opportunities for the promotion of women in industry will attract better workers, and better trained workers will make promotion possible; thereby both industry and the girl will be served.

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BOOK NOTES

BAST, HERBERT. *Essentials of Upholstery*. Bruce Publishing Company, 1928.

An analysis of the upholsterer's trade into twenty-two processes forms the first part of a text on upholstery by Bast. The directions and illustrations for each of these processes are remarkably clear. This first part of the text forms a reference book for the jobs for which instructions are given in the second part. Here again the illustrations are all that could be desired and the sixteen projects are carefully graded.

For instructors who are trained in the usual form of job analysis it may be a little confusing to find all the definitions and processes described in the first section of the book. Since this first section is for reference only it would probably have been clearer to the trade teacher if placed in an appendix.

Part III gives in brief but most interesting form the information regarding upholstery materials which a well-informed workman should know and which every person who makes use of upholstered material would be glad to find in such readable form.

LEE, EDWIN A. (Editor). *Objectives and Problems of Vocational Education*, McGraw-Hill, 1928. Price, \$3.00.

More than twenty years have passed since a group of men and women with vision and high purpose organized the National Society for the Promotion of Industrial Education. Just twelve years have passed since their efforts bore fruit in the signing of the Federal Smith-Hughes Act on February 23, 1917.

Each of the sixteen chapters of the volume edited by Dr. Lee is written by an expert in some phase of vocational education. A view of the future in the light of the past and present is given by the following authorities:

(Continued on page 36)

Final Report of the Part-time Education Committee

For two years the question of "What next in part-time education?" has been receiving earnest study and investigation from the entire body of part-time-school directors and teachers, from attendance supervisors, from social workers, and from the state and university divisions of vocational education. On October 1, 1927, a state-wide conference on part-time education was called by the State Department of Education to outline the problems for investigation and to organize the state into study groups. The state was accordingly divided into four districts and a chairman elected for each. The problems outlined at the general conference were studied and discussed at the section meetings which were held from time to time during the year.

As a result of conferences a tentative part-time-school bill was framed and sent out by the state chairman, Vierling Kersey, to the regional chairmen for discussion with their respective groups. The coordination committee, consisting of the state chairman and the four regional chairmen then met in Fresno in December, 1928, to receive reports from the various districts and embody the final suggestions into the part-time-school bill. John E. Carpenter was appointed chairman of the legislative committee for the organization and has just sent out to each member of the senate and of the assembly a letter asking their support of the bill and a summary of its chief provisions. A copy of this letter appears below:

To members of the education committee:

The education of the employed minor is a problem of interest to employers, social workers, and service clubs as well as educators, themselves. The part-time-education act which was passed in 1919 has been in operation for nine years. Time has shown that certain changes should be made in the law. Two years ago, a state-wide part-time-education committee was organized to study the problem of revision. The first general meeting was called by the State Department of Education at Fresno in October, 1927.

Attendance supervisors, social workers, directors, teachers, and the divisions of vocational education of the State Department of Education and of the State University participated in this organization.

An investigation of the needed changes in the part-time-education law were made and discussed at subsequent meetings held periodically in the four districts into which the state was divided. At a meeting of the district chairmen in January of this year, the final draft of the revised act was drawn and now appears in Senate Bills 332 and 385. The chief points of these bills are shown on the accompanying sheet.

The bill has received a great deal of thought and study by persons who come in contact with employed minors in various capacities and is recommended to you as worthy of your favorable consideration.

Very truly yours,

(Signed) JOHN E. CARPENTER,
Chairman, Legislative Committee
State Committee on Part-time Education.

The summary of the changes in the part-time-school law enclosed with the letter is also reproduced:

Chief Points of Revision in the Continuation Education Bill

The revised continuation-education law provides in Senate Bill No. 332 for certain changes as follows:



VIERLING KERSEY, NEWLY APPOINTED STATE
SUPERINTENDENT OF PUBLIC INSTRUCTION

1. *State-wide guidance.*—A program of guidance, placement, and follow-up for all minors in each high-school district.

2. *Minimum size increased.*—Special continuation classes for four hours a week whenever there are fifty (50) or more minors in the district subject to the act. (Present law reads 12 minors.)

3. *Flexibility increased.*—Standards and regulations regarding administration, instruction, reimbursement, and certification for continuation classes to be prescribed by the State Department of Education.

The companion bill, Senate Bill No. 385, provides:

1. *Four hours of instruction* each week for certain employed minors under eighteen years of age in cities having 50 or more such minors.

2. *Recognition of instruction at the place of employment* as well as under the school roof.

3. *Attendance of certain unemployed minors* increased to three hours a day during the period of unemployment.

4. *Exemption of pupils* employed in seasonal industries from special continuation classes and for their increased attendance at a dull season. (This section to take effect July 1, 1930.)

5. *The appointment of a special officer* to issue permits to work, and the disposal and control of such permits.

The chairman of the state association, Vierling Kersey, has summarized the findings of the organization in a report covering the work of the year. A portion of that report is given below.

I. Interpretation of the Present Law

The spirit of the law is an intention to extend the learning opportunity, to keep youth continuously in contact with a supervised learning relationship to the age of eighteen, and to stimulate an active learning attitude.

The law has needed uniform understanding, interpretation, and enforcement.

II. Provisions of the Present Law

The present law provides the following specific opportunities for employed youth:

1. A continuous learning opportunity for all youth not in a full-time, regular public or private school.
2. Provides for four hours each week of instruction on a high school basis. Keeps youth of high school age, otherwise denied the privilege of regular high school attendance, in contact with high school attitude.
3. Instruction offered youth is under the direction and supervision of the high school district through the control of the high school principal.
4. Specific content for instruction is included in provisions assuring:
 - a. Improved fundamentals
 - b. Vocational and educational counsel and guidance
 - c. Civic and vocational instruction
 - d. Upgrading of those in skilled occupations.
 - e. Home economics.
5. The law provides for cooperative relationships which grow up between employer, citizens, and school authorities and which will tend to have a powerful value in interpreting the entire school program. The law provides for this relationship in the form of coordination and home visiting.
6. The provisions of the law provide a continuous learning relationship so that those who are temporarily out of school or those who are permanently away from school may be helped to maintain a learning contact and continue to advance educationally. This is a particularly important period in the life of youth. Much potential leadership resides in part-time youths.
7. Coordination provided by this law furnishes a friendly contact between parent, worker, and employer which works to the advantage of each.
8. Part-time education, as provided by our law, prevents the labor field from being swamped with inefficient and poorly placed workers.
9. The provisions of the law safeguard the attitude of the workers for employer and for society.
10. The provisions of the law tend to lessen expensive job turnover, costly for employer and employee alike.
11. The law tends to lessen the desire to drop out of regular school on the part of boys and girls.
12. The law provides that the drop-outs of the regular school system shall be given every opportunity and teaches them that they have a place for success in this world.
13. The law provides an increased responsibility which is to be placed on parents and employers in the interest of youth assuring youth of safe consideration for their own future.
14. A better system of child accounting is provided under the present law than is provided under any school law enforced in the state.

III. Attitudes Toward the Present Law

The state committees on part-time education have studied the matter of attitudes toward part-time education throughout the state. In general, the committees conclude as follows:

1. The attitude toward part-time education in cities is entirely favorable on the part of employers, school officials, parents, junior workers, and social agencies.
2. The attitude in small communities where there is employment opportunity sufficient to absorb the supply of junior workers available, is entirely favorable. Coordination must be especially active in these communities in order to keep parents and employers satisfied as to the value of the four hours of instruction.
3. The attitude is not so good in small communities where there is little industry to absorb junior workers and where employment is casual, intermittent, or non-promotional. This is due, evidently, to lack of proper coordination and cooperation.

IV. Problems and Suggested Solutions

The State Committee on Part-time Education has discovered that there are many people still uninformed concerning the purpose of part-time education. Educators and instructors state their problems and solutions as follows:

1. Publicity and cooperation.

In communities where the public is best informed and best understands part-time education, there the finest spirit of cooperation exists. Where the public does not understand, it cannot cooperate.

During the past year, the various activities of the regional state committees on part-time education have done much to bring together workers in the field of part-time education throughout the state. As the part-time education leaders, themselves, get together the work is continually strengthened.

Regular school officers and teachers are coming more and more to understand part-time school youth; this understanding promotes cooperation between all the agencies that come in contact with employed youth. Part-time or continuation school instructors must exert a constant effort to have all school people understand the problems of employed youth. This creates a situation in which a more successful program can be developed.

Communities realize that education for employed youth is not alone sufficient in the program. Parents, employers, and communities must also be educated.

2. Philosophy.

The philosophy of part-time education is fundamentally sound and continues to go unquestioned. It is the technique and machinery now set up that seem to require additional modification and improvement.

A state-wide committee acting as a clearing house of instructional material and methods would eliminate the present general undetermined objectives and unorganized plans for the attainment of objectives in part-time education.

3. Instruction.

The organization of instruction so as to care for all children is developing a real value which comes from the four hours of part-time teaching each week. The con-

tinuation-school instructor must offer instruction satisfactory to youth, employer, and parents.

The definite values to be obtained in four hours' instruction need to be determined for each youth so that, at the close of his school life, he feels the worth of his education.

A program of grading and grouping pupils in part-time-school classes, emphasizing learning abilities and levels, will enhance teaching and put new confidence into young workers concerning their schooling.

A weakness in instruction in the part-time school growing out of a lack of continuity in lessons coupled with irregularity of attendance must be eliminated.

The wide-spread evil of putting part-time pupils into regular high-school classes or even in very close contact with them is rapidly disappearing.

The impression caused by inadequate equipment and unattractive quarters for part-time-school pupils often marks the work done under such conditions as second rate.

One of the handicaps under which the state program of part-time education labors can be eliminated by suggestions which provide an adequate teaching program with accompanying materials and content of instruction suited to the needs of part-time youth.

It must be remembered that there is a constant demand for tangible results from part-time education. This is as difficult to show as it is in any program of education for youth.

Cooperative vocational education when made available for certain part-time school pupils, brings about most excellent results. Half-time instruction for the vocational pupil is often the most effective method of part-time training.

4. Guidance and Coordination.

Absence of a program of guidance and placement, coupled with follow-up, causes a loss of many working days for youth. Teaching youth the experience of failure in school is no less distressing than teaching them the same thing out of school by permitting idleness.

Effective coordination is rapidly overcoming the idea that part-time school has an influence which tends to make children idle.

So far, only a small number of employers have actually met coordinators and even then all too infrequently. Maintaining a favorable attitude toward part-time education is as necessary as developing it in the first place.

Employers are interested in talking with a coordinator who can help them understand labor laws and regulations regarding minors, and who can help them see the value of employing youths who attend the part-time school.

Where employers are consulted and given a part in the planning of the instruction which the part-time high school offers the young worker, they become more enthusiastic about part-time education.

5. Personnel.

Where high-school principals and teachers have been given an incentive and a means for following up their drop-outs, the part-time school has ceased to be a dumping ground.

Blanket accusations such as "regular high school for the boy who does work in school," "part-time high school

for the boy who does not work in school," and "when a boy leaves high school he deserves no further consideration," are indicative of an attitude of educational aristocracy which, as long as it persists, is dangerous to democratic organization of education.

6. Teachers.

The teaching load of the part-time-school teacher has not as yet been determined or equalized throughout the state; the sooner this is done the sooner will the part-time school be able to attract the most able teachers.

There is a great demand that a program of itinerant teacher-training and teacher-improvement in service be provided, in order that teachers will not become stale in their work.

7. Attendance.

The enforcement of the part-time-school law has developed an attitude characteristic of the compulsory idea. The young people today are antagonistic toward anything labeled "compulsory." The school must change the emphasis from compulsion to attraction.

A study of the problem of exemption indicates that exemption rarely settles a part-time problem and it frequently upsets employer-worker equilibrium.

Regular school officers and teachers who have given up the idea that attendance at the part-time school is a penalty have helped much to build a constructive attitude toward part-time education.

8. Employment.

Unemployment problems are solved by two services which part-time education, alone, is equipped to offer: first, the service of vocational counsel and placement; and second, the service of coordination.

The idea that junior workers are displacing adults is being rapidly corrected and the relationship of junior labor to adult labor is being clarified.

Fundamentally wrong attitudes about work give some youths in the part-time school an opportunity to use compulsory attendance as a defense of idleness, and a reason for not having a job. Very distinct treatment of this situation on the part of the part-time-school teacher renders a real service.

V. Proposed Recommendations for the State Board of Education

1. A rating of California high schools on the basis of all elements concerned in the complete service of secondary education to the community. This rating to take into consideration the establishment and conduct of part-time or continuation classes.

2. A separation of funds and accounts for part-time education in order to indicate the real costs of part-time education and the real amounts of reimbursements received from state funds.

3. Provision for counsel and guidance in the junior and senior high schools of the state, whereby potential part-time pupils may develop a wholesome attitude toward work.

4. Provision for a tie-up between the continuation education program and the community program for adult education so that part-time pupils may not be lost at age eighteen.

5. Provision for continuing teacher-training programs for part-time-school teachers in cooperation with regular vocational teacher-training programs.

6. A better system of state-wide child accounting and transfer for pupils.

7. Authorization for accumulation of lesson material, its printing and distribution.

BOOK NOTES—(Continued from page 32)

the history of vocational education is discussed by Charles A. Bennett; the responsibility of the nation for vocational education by J. C. Wright and Charles R. Allen; trends in professional education by Robert J. Leonard; agricultural education by Z. M. Smith; commercial education by E. W. Barnhart; home economics education by Adelaide S. Baylor; part-time education by Robert L. Cooley; trade and industrial education by Nicholas Ricciardi and Benjamin W. Johnson; vocational teacher training by Robert H. Rodgers; vocational rehabilitation by Oscar M. Sullivan; vocational guidance by Harry D. Kitson; industrial arts by A. H. Edgerton; the employer's attitude by James P. Munroe; the worker's attitude by James J. Davis and Arthur E. Holder; policies by David Snedden; and a forecast and prophecy by Charles A. Prosser.

This list of names is sufficient to guarantee a reliable presentation of the various fields in vocational education. Whatever the special interest of the reader, he will find among the sixteen chapters of this book the last word in critical analysis and discussion.

HYDE, BLANCH E. *The Sewing Book*. Century, 1928. Price, \$2.50.

An analysis of dressmaking as a trade would doubtless have presented a very different sequence of chapters from the one appearing in *The Sewing Book*. If, however, the instructor has her own analysis of this trade the needed information for each job can be readily found in this text. Perhaps any book on sewing must be used as a reference book rather than as a text as the variety of projects in a single class is usually large. The descriptions and cuts are clear and the chapters on planning a wardrobe, care of clothing, and repair and renovating materials are useful additions to the usual material on sewing.

DAVIS, NETTIE S. *Applied Arithmetic for Girls*. Bruce Publishing Company, 1928. Price, 88 cents. 126 p.

It is still a fundamental and unsettled question as to whether the technical information supplementing trade instruction should begin with a project and work out into such arithmetic, science, and drawing as are needed or whether it should begin with certain processes in the technical subject and gather trade illustrations to enforce the instruction. The author of *Applied Arithmetic for Girls* has chosen the latter method for the development of a text which would explain itself better if it were called applied arithmetic in dressmaking, millinery, and homekeeping. The field covered by the problems is not broad enough for the present title.

Any book dealing with economic material will soon be found out of date as to prices, styles, and budgets and a book written in one section of the country cannot apply to all sections, but the author suggests that "the prices

of materials and labor should be checked with local prices and conditions."

The text has many interesting sections and is almost a pioneer effort to make a practical text in its field. It should be viewed as such and used with such modifications as suit each class. Some of the sections to be recommended are making gauges, food problems, cost of operating electrical and gas appliances, and the lessons on cost of furnishing an apartment.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. (Coordination in Part-time Education. March, 1921.
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 11. Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 16. Bulletin No. 23. Developments in Part-time Education in California. February, 1928.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

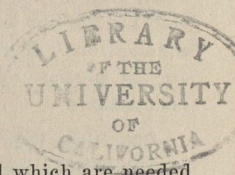
- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

NEWS NOTES

Vocational Education News Notes, v. III, Nos. 1-9, October, 1924-June, 1926 (No. 7 out of print); v. IV, Nos. 1-5, November, 1926-April, 1928; v. V, No. 1, November, 1928; v. V, No. 2, March, 1929.

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Objectives of Business Education

By IRA W. KIBBY
Chief, Bureau of Business Education

In developing the objectives of business education it is necessary to understand, first, how business education came into being and what it is; and second, the place of business education in the sum total of the educational processes. In a previous article in the News Notes the writer showed the development of business and of commercial occupations and how, through these developments, a vast fund of business knowledge had been brought into existence. It was pointed out:

1. That this business knowledge has become an important part of the common social heritage which should be passed down to posterity.
2. That three groups of individuals are especially interested in obtaining an understanding of certain phases of this knowledge; namely,
 - a. Those who need to acquire certain skills, attitudes, and techniques, so as to perform successfully a type business job.
 - b. Those who need to acquire certain skills, attitudes, and techniques so as not only to perform a type business job but also to fit themselves for promotional possibilities leading to a business career.
 - c. Those who desire to become acquainted with certain phases of business knowledge, and certain skills and techniques that will permit them to function best in their social activities as workers and citizens.
3. That business education is the process of imparting this acquired business knowledge and techniques under controlled conditions.

Business Education and the Curriculum

Education is the sum total of directed processes by means of which the social group transmits its acquired knowledge, skills, and techniques to each on-coming generation. Business education is the part which deals with

the processes developed by business and which are needed to carry on business or the activities developed out of business. It dips into numerous fields of knowledge and re-adapts certain segments of these fields to its particular use, for example, mathematics. It, in turn, has brought into being certain segments of knowledge that have been re-adapted to other fields. Social science, for example, is indebted to business for a segment of its content. Business is not a complete program of education by itself. Its purpose, rather, is to develop the habits, skills, technical knowledge and attitudes most useful in business pursuits. It should not be used fundamentally to develop the habits, skills, and attitudes that do not contribute primarily to business understanding, such as habits of health, appreciation of literature and science, for such habits can be developed more effectively and efficiently through organized courses in these particular fields of knowledge. If habits other than those which contribute to business understanding can be developed incidentally through courses in business, without a waste of time or a modification of content and objective, they should be developed so as to assist in the complete educational process.

A business curriculum should not consist entirely of business subjects but should also contain a group of subjects so coordinated as to develop certain skills, attitudes, and techniques needed to meet certain definite objectives and, further, such other subjects as are necessary to develop habits and attitudes that make for good citizenship and worthy membership in the social group. The curriculum should, therefore, have several objectives. Each subject or group of subjects should contribute primarily to one of these objectives and incidentally, without sacrificing its major purpose, to any other objective that makes for the welfare of the individual.



MONUMENTS TO BUSINESS

The Vocational Objective

Business knowledge was first classified and organized into reading and teaching content for the purpose of assisting those who were engaged or expected to become engaged in the field of business. Bookkeeping was set forth in a treatise not for its cultural value but purely for the purpose of passing this technique on to others so that it could be used in occupational endeavors. The typewriter was developed not for the purpose of forming skills that would be useful in developing motor coordination but for the sole purpose of speeding up business communications. Typewriting, as a subject, was introduced for the purpose of preparing individuals to work in office occupations.

The technique of transportation was organized into teaching content not for the purpose of training individuals in the art of travel but to train workers to handle transportation problems so that they could perform their jobs more efficiently and effectively. Content for other business processes has been organized largely for its practical use in training people to become vocationally competent. All of these processes may contribute to the cultural or social welfare of the individual studying them, but the primary purpose for the organization of such content was to pass on to individuals information that would aid them in performing more competently their occupational pursuits.

Business subjects were brought into the school curriculum because of their practical value. Thus in the organization of the first public high school in New York in 1825, among the subjects offered were spelling, writing, arithmetic, geography, and bookkeeping. All of these subjects contributed directly to the training of pupils who desired to enter the business occupations then in vogue. In referring to the purpose for the organization of this institution the first annual report of the High School Society of New York says, "It should never be forgotten that the grand objective of this institution is to prepare its boys for such advancements and such pursuits in life as they are destined to after leaving it."*

Shorthand and typewriting were introduced into the public schools purely for the purpose of training individuals to enter employment as stenographers and typists. Likewise, other business subjects have, from time to time, been introduced into the curriculum. The reason for introducing these subjects in each instance has been that they would make the curriculum more practical, that they would contribute to the development of vocational knowledge, skills, and attitudes.

After these subjects had been in the curriculum for a period of time teachers began to justify their place therein on values other than vocational, such as cultural, general educational, pre-vocational, disciplinary, and social. Undoubtedly the business subjects contribute to some extent to all of these values but, with the exception of the social value which should include the pre-vocational and general educational values, the contribution is incidental rather than primary.

The primary purpose for teaching business subjects is, undoubtedly, to train for occupational competency and the main objective is, therefore, vocational.

The Cultural Values

"When a man learns well a trade or profession he has made his own much of the slowly evolved knowledge, art, and ideals that make for proficiency in that vocation. When a man has learned how to use available medical knowledge both as personally administered hygiene and as utilization of best medical service in time of need he has achieved superior mastery of health conservation-culture."* When an individual has learned how to use business skill and business knowledge so as to serve society to the best of his ability; when he can administer rightly to the needs of business in the interest of society, as well as to himself; when he has learned to use his business skill and knowledge unselfishly to aid his government; when he has developed a real love for his work in order that he may serve others and not necessarily himself; he has achieved a mastery of those social values of business which, to that individual, is culture.

In so far as the teacher can develop these ideals of mastery, not only for the purpose of serving the individual, but also society, he develops cultural values no matter what subject he may be teaching.

Snedden says: "*The concrete objectives of truly cultural education must be determined in terms of abiding interests, tastes, valuations, ideals, amateur or avocational accomplishments, and spiritual 'philosophies of life' in such organized fields of human accomplishment as literature, music, natural science, history, philosophy, graphic and plastic art, language, manners, religions, crafts, travel, and others.*" The individual achievements in any of these fields are "low or high, coarse or refined, elevated or debasing, rich or cheap, fine or vulgar." In the teaching of any subject the refining, elevating, rich and fine elements should be developed. Good teaching demands this; social progress demands it. The school would not be contributing to its highest purpose if this side of any subject was not brought out. Any subject properly taught develops culture.

The Social Objective

The expanding of business has brought into being new institutions of business such as our modern banking and credit institutions, our modern transportation and communication systems, our modern systems of distributing goods and services. These newer business institutions are now so interwoven with our social and everyday life activities that some of the knowledge that the building of these institutions has brought into being is not only needed by the workers in the business field but is also needed by all members of the social group.

A sufficient knowledge of banks, money, and credit should be acquired by all, so that the individual may know how these function in his everyday life activities. Likewise, knowledge of our transportation and communication systems and of how these contribute to the wel-

* Cubberly, E. P. Public education in the United States.

* Snedden, David. Educational sociology for beginners.

fare of each member of society is an essential part of the information that every boy and girl should have. A sufficient knowledge of typewriting may be of social value to an individual in conducting his own private affairs.

Such studies may be designed to give the student a background for vocational selection. They may be needed to develop motor and mental coordination. If the student decided later to enter a business occupation these studies become pre-vocational.

Business is so interwoven with our whole economic, political, and social structure that an understanding of business procedure is often needed to interpret political and social trends. Certain segments of business knowledge have values that contribute to the general social welfare of all individuals and such segments of business knowledge should be studied for the purpose of contributing to the general education of the student.

Business courses designed to give the information as set forth above have a social aim or objective. They contribute to building up those habits and attitudes that make for proper living within the social group.

Business education has two distinct aims: first, the vocational, which is to prepare an individual for a type business occupation; and second, the social, which is to give to any student a knowledge of such business information as he may need to carry on best as a member of the social group. Incidentally, when possible, courses in business education should contribute to such educational values as the school desires to develop in the individual, just as all courses, after satisfying their major objectives, should so contribute. This contribution, however, should not in any way subordinate the major objective of the subject.

Commercial Teachers Find Many Summer Session Courses

The following courses, given at the various summer sessions this summer, will be of interest to commercial teachers, according to Dr. I. W. Kibby, chief of the Bureau of Business Education, State Department of Education.

FRESNO STATE TEACHERS COLLEGE, HUNTINGTON LAKE.

Industrial and commercial history of the United States—Dean Nowell.

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES.

Business law—Professor Marston.

Curriculum and methods in secretarial subjects—Mr. Bullock.

Business correspondence—Assistant Professor Naether.

Principles of business organization—Professor Marston.

Salesmanship—Assistant Professor Naether.

Organization and administration of commercial education—Mr. Bullock.

Curriculum and methods in penmanship—Miss Purcell.

UNIVERSITY OF CALIFORNIA, BERKELEY.

Industrial and commercial history of the United States—Professor Lippincott.

Elements of accounting—Associate Professor Forman.

Fundamentals of business administration—Mr. Johnston.

Commercial law—Assistant Professor Stone.

Current problems in commercial education—Dr. Kibby.

Principles of commercial education—Dr. Kibby.

Vocational education—Dr. Ricciardi.

Administration and supervision of vocational education—Dr. Prosser and Mr. Campion.

Principles of conference leading—Mr. Mallary.

Methods in teaching typewriting—Assistant Professor Whillock.

Demonstration classes in teaching typewriting—Assistant Professor Whillock.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES.

Industrial and commercial history of the United States—Professor Grether.

Elements of accounting—Professor Nobel.

Business organization and administration—Professor Nobel.

Principles of commercial education—Mr. Sorensen.

Principles and problems of teaching salesmanship—Miss Todd.

Methods of teaching commercial subjects—Mr. Sorensen.

Methods in observation of retailing—Miss Todd.

Vocational guidance—Dr. Horridge.

SAN JOSE STATE TEACHERS COLLEGE, SAN JOSE.

Methods and materials for teaching junior business training—Professor Hoffman.

Typewriting—Assistant Professor Ford.

Accounting—Assistant Professor Kelley.

Elementary statistical methods—Professor Staffelbach.

Content and method for general clerical training—Miss Hoffman.

Methods of teaching secretarial subjects in the secondary schools—Assistant Professor Ford, Miss Hoffman.

Methods of teaching accounting—Assistant Professor Kelley.

Commercial education problems—Assistant Professor Ford.

Stenotyping and methods of teaching—Mrs. Carlson.

Business Education Notes

Follow-up studies.—Lucile H. Snyder, chairman of a research committee for commercial education at San Jose High School, and Mrs. Zella C. Walmsley, of Esparto Union High School, are each making a study of the occupations of graduate students of their respective schools. Miss Snyder is also making a survey of commercial occupations in San Jose. Mrs. Walmsley is including both the graduates and drop-outs of the high schools in Yolo County. The students who took commercial subjects will receive special attention.

Commercial majors approved.—The Central Section of the Commercial Teachers Association held its regular spring meeting in Fresno on March 23, with L. B. Davy, of Bakersfield High School as president, and J. F. Leonard, of Kerman High School, as secretary. The section approved the commercial majors as set up in the preliminary bulletin C-5 recently issued by the Bureau of Business Education.

A large number of principals attended the section given over to the discussion of the majors in business education at the High School Principals' convention, held in Oakland during the week of March 25. C. E. Overman of Modesto discussed the majors as outlined in the preliminary bulletin C-5. The consensus of opinion of the group, in the discussion that followed, was in favor of adopting the majors as set forth in the bulletin.

Shall the Junior College Offer Agriculture?

The question as to whether the junior college should offer courses in agriculture and if so what should be the objectives of such courses was discussed at a conference held in San Jose in February. Fourteen junior colleges were represented. Julian A. McPhee, chief of the Bureau of Agriculture Education, State Department of Education, acted as chairman, and Howard F. Chappell of San Jose State Teachers College, acted as secretary. The minutes of the conference are given below:

The junior college agricultural meeting was called to order by the chairman at 2:00 p.m. Friday, February 15, 1929. There were fourteen interested institutions represented at the meeting. The first question discussed was, "What are the objectives of an agricultural program in a junior college?" Three major objectives were listed, as follows:

1. Preparation for upper division university agricultural courses.
2. Terminal courses in agriculture.
3. Adult education in agriculture.

A discussion followed as to what constituted university preparatory courses, and the following lower division courses in agriculture that could be offered in junior colleges were listed:

1. Animal husbandry.
2. Dairy products.
3. Pomology.
4. Agricultural economics.
5. Farm mechanics.

The advantages of offering this university preparatory work in agriculture were suggested as follows:

1. Would hold students to their agricultural objective while they are in junior college.
2. Would give junior college students an opportunity to explore in the agricultural field.
3. Would serve as a semi-vocational subject for those without an agricultural objective.
4. Would give the junior colleges an opportunity to recruit candidates for highly specialized agricultural positions.
5. Would give an opportunity in agriculture for drop-outs who had planned on continuing in university work.

The disadvantages of offering this university preparatory work in agriculture were discussed and listed as follows:

1. Probable high cost on per capita basis in small junior colleges.
2. Would conflict with the fundamental science courses that must be taken before an agricultural student can be given a B.S. degree from the university.
3. Would not serve the needs of those intending to leave school at the conclusion of their junior college work.

A discussion was then held on what is meant by a terminal course in agriculture. It was finally decided that instead of using the term of "terminal course" the phrase "terminal curriculum" should be used, since preparation in some type of agriculture to terminate at the end of junior college should include more than one course. The following definition for a terminal curriculum was suggested:

"A terminal curriculum in agriculture in a junior college is one that is made up of courses that are practical,

that are specialized, and that fit for immediate employment, and terminate in the junior college."

Another definition that was suggested was:

"The terminal agricultural curriculum in junior college shall be organized without consideration of the requirements of degree curricula of the university. They may contain general or special courses in agriculture. They shall not be exacting in academic requirements."

The next question discussed was, "How shall junior colleges determine whether they should offer courses in agriculture?" The following factors, which may help to determine when agriculture shall be offered, were suggested:

1. Local demand.
2. Type of agriculture in the community.
3. Potential possibilities for trained agriculturists in the community.
4. The number of students in junior college who come from outside the junior college district that have not had the opportunity of getting agriculture while in high school.
5. The number of students who did not take agriculture while in high school.
6. Advisability of a repetition of certain agricultural courses in the junior college, where these courses are given in the high school.
7. Location of the junior college.
8. Financial support of the junior college.
9. The opportunity of junior colleges to meet certain requirements in agriculture for future elementary teachers who ultimately finish at a state teachers college.
10. Interest of the junior college administration and community in an agricultural program.
11. Placement opportunities in agriculture for junior college graduates.
12. Population studies of the community.
13. Statistics on follow-up work of the high school graduate.

A resolution was presented asking that each junior college make a survey, taking into consideration the above-named factors, and report back at some future meeting whether or not they feel it advisable to offer either a university preparatory agricultural curriculum or terminal agricultural curriculum after the survey is made.

The next question discussed was, "Should junior colleges offer adult agricultural education?" The following types of courses were suggested:

1. Evening schools (10 or more lessons).
2. Short courses (one or two weeks on some specialized phase of agriculture).
3. Experimental work or demonstrational work, such as disease control of citrus fruits, feeding of poultry, fertilizer, etc.
4. Extension service in agriculture.

It was generally agreed that the adult type of agricultural program should be secondary to the teaching program. In other words, adult work should not be the primary purpose of establishing agricultural courses in junior colleges. Adult agricultural education in junior colleges should always be done in cooperation with other public agencies and institutions working in the same field.

A discussion took place on the qualifications of the junior college teacher of agriculture. It was decided

that each teacher of agriculture in the junior college should have specialized training in the field of agriculture in which he is to teach. The training that is required of the average high-school agricultural teacher is not sufficient for the junior-college agricultural teacher. It is preferable that the teacher should have a master's degree in the field in which he is to give the agricultural instruction.

At the conclusion of the meeting the following resolution was passed:

"It is the concensus of opinion of this meeting that before junior colleges consider offering courses in agriculture of either a university preparatory or terminal character, that a careful survey of the local situation be made, and that the thirteen factors mentioned above be used as a basis for the survey."

HOWARD F. CHAPPELL, Acting Secretary.

Competitive Project Work in San Joaquin Valley

Competitive work of any sort for high school pupils stimulates them to greater endeavor and, where properly handled, may be used to advantage by instructors. Working on this theory, the agricultural teachers of the Modesto district started competitive project work between the seven schools in that district, according to E. E. Everett, regional supervisor of agricultural education in San Joaquin Valley. The project work was divided into four groups: farm mechanics, horticulture, livestock, and poultry. Each school entered one of its best projects in each of these classes. A group of three judges was chosen by the agricultural teachers and the best projects were selected by them. Animals, feed, tools, and pruning equipment were chosen as prizes.

The following score card was used by the judges:

Items—	Per Cent
Quality and thoroughness of work	25
Practicability	10
Record book	25
Scope of project	15
Management	10

The Fresno and Tulare districts adopted this plan also, and used the same set of rules and score card. From May 18 to May 30 the winning projects in each class from these districts were judged against each other and the best project in the San Joaquin Valley in farm mechanics, horticulture, livestock, and poultry was selected.

This plan should have a double value. In the first place, it should stimulate the boys to do better work on their home projects, and to focus interest on the practical phase of the vocational agriculture program; and, in the second place, if the proper judges are selected for the local district and regional selection of projects, excellent publicity is secured for the vocational program.

The School of Opportunity.—The Cosmopolitan Evening School is the title of a new text by John F. Friese, assistant professor of industrial education, University of Wisconsin. This is another book in the Century Vocational Series edited by Charles A. Prosser. Administration, curricula, teachers, and supervision are among the topics treated. The book is specific and definite, planned for use as a class text.

Summer Session at Davis

Teachers of vocational subjects are ever alert for opportunities to improve themselves, both technically and professionally. The University of California, in cooperation with the State Department of Education, is aware of this fact and is making plans to meet the demand. At the Branch of the College of Agriculture at Davis, four intensive weeks of work are being planned for teachers of agriculture, beginning June 17 and closing July 13.

The courses are being set up on the short-unit basis so that teachers may come for such portions of the work as they specifically need and for which they can spare the time from their other duties. The first week, June 17 to June 22, will be devoted exclusively to the field of dairying, work being offered in both dairy industry and dairy production. The second week, June 24 to June 29, will be devoted to the study of horticultural problems. The next two weeks, July 1 to July 13, will carry work in the fields of poultry and agronomy concurrently, one-half of each day being devoted to each subject.

Technical instruction will receive the principal emphasis. However, since certain teachers will need some work in education to secure special credentials or renew those already held, professional courses will extend throughout the four weeks on a somewhat less intensive basis. One course will be designed primarily for experienced teachers, while another will provide for introductory work for young men going out during the coming year as cadets.

Results of a questionnaire sent to employed teachers in the state show that approximately seventy expect to attend. This does not include prospective cadets nor such teachers as usually enroll from outside the state, so the total enrollment throughout the four weeks is expected to be about one hundred. Of those indicating a choice of technical matter, thirty designated agronomy, forty-one poultry, forty-three horticulture, and forty-seven dairying. This distribution indicates that more than fifty men will probably be enrolled in each of the several courses.

No college credit toward degrees will be allowed for this work. Since upgrading is the intent, it is thought desirable to relieve instructors of formal institutional restrictions so that they may adapt instruction definitely to the needs of those enrolled. However, by special arrangement with the State Department of Education, this work is acceptable toward the granting of or the renewal of special credentials to teach agriculture.

Special announcements of the courses are available through the Department of Agricultural Education, University Farm, Davis.—H. M. SKIDMORE.

Contests for Ag Boys

Semi-final contests have been held in the northern, central, and southern regions of the state in judging livestock, dairy cattle, dairy products, poultry, and trees. Contests are also being held in farm mechanics. The winners in these contests compete in the finals held in May at the California Polytechnic School at San Luis Obispo.

The annual University Picnic was held at Davis on April 19 and 20. Many high-school departments of agriculture were represented and the boys who attended had the usual "big time."—H. F. CHAPPELL.

Valley Program in Agriculture

Instructors in agriculture in the Sacramento Valley region met and adopted a program of work stated in terms of desirable goals to be reached, according to A. G. Rinn, regional supervisor of agricultural instruction, and instructor in agriculture at Chico State Teachers College.

The goals set up are in terms of projects to be featured, types of class instruction and instructional aids, special programs in farm mechanics, extra-curricular activities, and general clerical efficiency.

The following items are the goals agreed upon:

A. Projects:

1. A minimum of 45 minutes per week given to consideration of projects in the classroom.
2. A record of project visits open to inspection.
3. Project books in the classroom showing project plan, study outline, and accounts up to date.
4. Goal of \$100 profit per student set.
5. Minimum of one project visit per student per month.
6. All projects to close December 1.
7. All new projects to start December 1.
8. Supervised practice work for all those who cannot have a project.
9. Discourage taking one rabbit as project.
10. Every boy's father, mother, or guardian to understand the project idea of "Learn by doing," and "Earn while you learn."
11. No project left unvisited during vacation longer than one month.

B. Classroom instruction:

1. A daily lesson plan of every course offered on the enterprise—job plan.
2. Recitations on the discussion plan.
3. At least one field trip per class per week.
4. Pictures and charts to be on the wall and changed occasionally.
5. Tables and chairs if possible instead of desks.
6. Bulletins in quantity filed and classified for easy reference.
7. Paper, pen points, etc., in containers so students may help themselves.
8. High quality of work required.
9. Kindly attitude, but no "let-down" in discipline.
10. As many project pictures as possible.

C. Farm mechanics:

1. Survey of every farm-mechanics student's farm.
2. Course of study made from survey of farms of students and community.
3. Outline of every course on the enterprise—job basis.
4. At least one visit to each farm mechanics student's farm by shop or agriculture man each semester in connection with farm mechanics work.
5. A record of visits made.
6. A check list of all projects completed.
7. As many pictures of projects "before and after" as possible.
8. Lesson plans for all projects.
9. Shop time-card for each student.
10. A place for everything in the shop and everything in its place.

D. Part-time and evening schools:

1. At least one evening and part-time class in every school.

E. Judging teams:

1. At least one judging team per class per school.
2. At least two sectional judging contests per semester.
3. Every agriculture student a junior aggie in good standing.
4. Not more than one double class period per week per class devoted to judging.

F. Junior aggies:

1. A junior aggie organization in every school.
2. Regular meetings—no postponements if possible.
3. A program of work.
4. Father-and-son banquet.
5. Annual picnic.
6. Camping trip.
7. Aggie paper.
8. A regional meeting of junior aggie representatives and affiliations with state organization.

G. General:

1. A program of work in writing, planned and executed.
2. A plan of professional improvement.
3. Separate folders for communications from state office and regional office.
4. An inventory of the agriculture equipment in the instructor's desk.
5. Individual record cards kept up-to-date.
6. All records and reports kept in one place in the instructor's desk.
7. Attend as many farm meetings as possible and assist with farmer's program.
8. Monthly sectional meetings.

New Type of Exhibit

The directors of the part-time schools of the state are to be congratulated on the excellent showing of instructional material displayed at the High School Principals' Convention in Oakland this spring.

At the December meeting of the Northern California Part-time Teachers Association a first exhibit of the work of the part-time schools in that section was shown in San Francisco. The exhibit was unique in that it was not an exhibit of pupils' accomplishments but of teachers' methods and administrative procedure. Lesson sheets, projects, manuals of directions, and blanks, forms, and records formed the principal part of the exhibit.

So much material which was interesting, original, and helpful to teachers appeared in this first exhibit that it was decided to have a state-wide exhibit of a similar nature at the meeting of the high school principals in Oakland in March. Morris E. Hurley, principal of Merritt High School in Oakland, was the chairman of the committee which assembled the state-wide exhibit.

A case has been made for the exhibit and it has now started traveling to various cities where it will be studied more intensively by teachers. During the summer session the exhibit will be displayed in Haviland Hall, of the University of California, under the auspices of the Division of Vocational Education.

Training Industrial Workers in California

By J. C. BESWICK

Chief, Bureau of Trade and Industrial Education

The major portion of all training of trade and industrial workers is accomplished through the more or less well-organized efforts of industry, itself. Three types of plant training have been listed. Training for industrial leadership was discussed in the first part of this article appearing in the previous issue of the News Notes. The second method of training is of two types—both of which are mostly under plant control: namely, employment instruction, and training for a specific job.

Training Mostly Under Plant Control

Employment instruction.—A carefully planned employment procedure is used by companies who appreciate the psychological and economic value of starting men right. This is the first step in a well-organized training program. The courtesy of introducing a new employee to his foreman and associates, explaining to him conditions of his employment and giving him general information to assist him in adjusting himself to his work tends to make him feel at home and wins his interest and good will. Labor turnover may be very materially reduced by such procedure. An attractive booklet descriptive of the factory and its output may be given the new employee; also a booklet setting forth the hours of employment, date of pay day, methods of payment, sick benefit associations, and profit sharing conditions.

Some companies use tests as a basis for employing its workers. Under scientific handling, these tests have shown considerable promise; but the science is yet in an experimental stage as far as the bulk of the industries are concerned.

Training for a specific job.—Training for a specific job is carried on in two different ways:

1. Preliminary or vestibule training. Whatever device or procedure may be employed to insure the employment of the right man for each job within an industry, the problem of training is omnipresent. To reduce labor turnover to a minimum, the most careful methods of selection and adjusting the individual to his job, must be used.

Some jobs require a certain amount of preliminary or so-called "vestibule" training before definitely assigning a man to a job on production. When the nature of the work is such as to involve risk to the safety of the employees or patrons (public service) or when the service is of unusual value, such training is provided under conditions closely approaching actual working conditions. Necessary instruction is given on policies, safety rules, courtesy, clerical procedure, nature and use of equipment, and detailed practice of operations.

2. Training on the job. The greater part of training new help for a special pay-roll job must necessarily be that given on actual production. Under the actual requirements of the job over a reasonable period of performance the foreman or whoever is responsible for adjusting the man to his work, can ascertain the man's fitness for the job for which he applied and is employed. If his capacities are not suited to the work for which he was employed, he can be placed in work for which he is suited, avoiding a loss to the individual and to the industry. Under an

organized training program, analysis must be made to determine the specific job-skills required, both manipulative and technical, and related technical or other related knowledge necessary for the operator. The instructional material is scientifically prepared, based on the requirements revealed in the job analysis.

The character of the work and sometimes the size of the plant determine the method of training used. Some companies combine both preliminary and actual job training; others, such as public service corporations whose product is service, use the vestibule system, and again others find it most profitable and convenient to give the instruction or training on production. Whether the training is organized or unorganized, the training of the worker must be done and is done, regardless of how he secures it, whether the company pays for it on a definitely organized basis or through waste of materials, damage to machinery and accident, all chargeable to higher production costs.

The training of new workers usually is the responsibility of foremen or sub-foremen. If no training department within the plant provides instruction for foreman or supervisor on how to teach and in the fundamental principles of training, they must look to some other agency for such service to meet this need.

Expanding Teacher Training

The keen competition in industry so often referred to is no myth. Just as scientific management and intelligent leadership are demanded today in our complex and highly organized economic structure, so also is the matter of intelligent directing and training of workers in industry regarded as a vital factor in the scheme of productive efficiency.

All along the line of production we find the need for teaching. Foremen and sub-foremen are constantly confronted with a teaching job. "Teaching the supervisors to teach" is a familiar topic in industrial circles.

The State Bureau of Trade and Industrial Education believes that its well-organized and efficient teacher-training departments in the University of California at Los Angeles, and in Berkeley can render a valuable social service by extending their functions to include such training service in industry when needed, i.e., teaching the foreman to teach. There are many plants in California that would be glad to avail themselves of such teacher-training service.

The trend of industrial teacher training in the next few years will be outstanding in the direction of service in industry.

(To be continued)

State Board Calls Conference

The State Board of Education is calling a conference of state vocational teachers to be held, in conjunction with the California Vocational Association, at Santa Barbara, on August 2 and 3. All superintendents and principals of schools are invited to attend this conference, as representatives of their boards of education. If a superintendent or principal can not attend, it is requested that he recommend to his board of education that representatives of such boards be sent to the Santa Barbara conference.

The Training of Teachers of Evening Trade Extension Classes

By B. W. JOHNSON

Assistant Director, Division of Vocational Education, University of California at Los Angeles

The regulations of the State Department of Education governing the granting of state teachers' credentials which became effective September 15, 1928, set a new standard for the vocational teachers of evening industrial classes by requiring, in addition to the usual high standards of leadership and ability in their trades, the completion of a minimum of 36 hours of teacher training. This requirement may be completed in four ways:

- "A. Residence courses during the school year and in summer sessions at the University of California at Berkeley and at Los Angeles.
- B. Special evening extension teacher-training classes in centers and schools where there is a group demand for this type of service.
- C. Itinerant teacher training, individual or group instruction.
- D. Correspondence courses."

Classification is as follows:

- I. Classification will apply to the credential, the holder of which has entered upon or completed the required teacher training and is renewable. The second renewal, however, will be conditioned upon completion of the minimum teacher-training requirement.
- II. Classification will apply to the credential, the holder of which has not taken any of the required teacher training and is renewable but once."

This policy is in harmony with the general policy of the state regarding credentials for adult education. It is also a recognition of the growing importance of adult education and of training for effective teaching.

In response to this requirement the Division of Vocational Education, University of California at Los Angeles, proceeded to carry out these provisions in so far as it was possible and attempted to determine the nature of the problem and the best ways for dealing with it. Over a year ago, in anticipation of this requirement, inquiries were sent to thirty different states asking for information upon this problem of the training of evening vocational school teachers. Replies were received from two-thirds of the states. Very little apparently was being done throughout the country, although the need was recognized as being very great, in view of the increasing importance of adult education. Summarizing the replies received, the following conclusions were reached:

- 1. That some training is necessary for all evening-school teachers.
- 2. That it is impossible to provide all that is needed on a pre-employment basis and that the rule applies here, as in other types of vocational education, the most effective teacher training must be done on the trade-extension basis subsequent to employment.
- 3. That it is also necessary that there be an organized content of instruction for the training of evening vocational teachers based upon an analysis of the responsibilities they have to fulfill. This, too, is in accord with the standard accepted practice in all vocational education.

4. That the importance of evening-school instruction should be recognized in the standards set up for the professional training of evening-school teachers by the various states which will insure their proper training. That the method of certificating evening-school teachers should offer inducements, through reimbursement or other means of recognition, differentiating those who teach without the professional training from those who secure the minimum professional training.

5. That this training can be given in various ways:

a. In class groups on an extension service basis for the minimum number of hours which seem necessary in order to reach the objective determined upon in organizing evening-school teacher-training courses. These extension courses as is true of other extension courses should be set at times and places that will serve the need of the group who are to receive the training.

b. Correspondence instruction can be used for the training of evening-school teachers and may be made fairly effective providing there is a follow-up with efficient supervision.

c. Itinerant teacher training on the job is good, but it is likely to prove the least effective because of the confusion that will arise between training and supervision, and because very little training can be given to an individual while he is responsible for actually doing the job. Training on the job, as a sound procedure in vocational education in other fields, does not attempt to train the worker while he is doing the job, but aims to secure an appropriate time and place so that the instruction that functions on the job can be given as nearly as possible at the time the worker needs it and at the time when he is free to receive it. There is a vast difference between the job of training a worker while handling tools and materials and the job of training a teacher while he is handling learners.

d. Follow-up work in teacher training is as imperative as in other vocational work. Only in this manner can the particular problems of the trainees be dealt with, the help be given when needed, and the training necessary for the up-grading of the evening-school teacher be provided.

In the light of these conclusions, it was decided to experiment with different ways of giving the training. In Los Angeles the past winter a splendid opportunity to experiment with this problem presented itself at the Frank Wiggins Trade Evening School which employs 62 teachers in evening classes. It was found that there were some 25 or 30 teachers brought in from the various trades and occupations who had received no teacher training. Benjamin W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles, and Leslie G. Stier, supervisor of vocational education for the Los Angeles City Schools, undertook to train this group.

After several evenings of preliminary study of the problem, arrangements were made with these teachers for classes meeting one hour each week. The members agreed to give an additional hour in preparation for this class. This, with follow-up activities for two hours of the even-

ing by the teacher trainers, was considered the equivalent of two hours of training a week for 18 weeks.

It was agreed that the course of training which had previously been prepared, based upon a job analysis of what an evening-school teacher is required to do and know, would be carried out. It was not known how much of this course could be given in 18 evenings, but it was hoped the most important subjects listed would be dealt with and supplemented by the personal contacts with the teachers.

Owing to the limited time of one-hour class periods the methods of handling this work were modified from that followed in the regular teacher-training classes held on the two-hours' basis. The conference procedure, which is the most effective with adults, consequently, had to be modified more or less to teaching and to giving information—what to do and how to do it. No text or reference material was required, although such material was suggested. Those most interested availed themselves of this material.

The procedure in the group was as follows: Careful preparation was made for each session by setting up objectives with an outline to be followed by the leader and with the required assignments. After the meeting was over the result of the evening's work was carefully written up, mimeographed, and distributed at the next meeting. This furnished background material for the course and served in place of a textbook. It had the added value of being an account of experiences which the class had been through and to which they had contributed. It proved especially valuable in supplementing the all-too-brief hour of the class period and served in a way for individual instructional material. The twelve topics outlined for discussion were the following:

1. Determining what to teach.
2. The instructional order.
3. How to teach.
4. Teaching devices and how to use them.
5. Learning conditions.
6. How to measure progress.
7. Instructional accounting.
8. The instructor's marginal responsibilities.
9. Recruiting and selecting the class.
10. Trade extension work for adults.
11. Demonstration and observation teaching.
12. Equipment, tools, and supplies.

At the eighteenth session of this group, the interest of the class led them to vote to continue further sessions in order that certain topics not yet covered could be considered. All of the topics, with the exception of 7, 8, 9, and 12 were dealt with in this way.

As a fulfillment of this requirement each member of the respective groups is expected to complete, with the assistance of the leader, a statement of one or more short units of instruction in his field of teaching, and, also, one or more job instruction sheets. This is a minimum essential to be sure that the evening-school teacher knows how to organize a course of training for which he is responsible, as well as how to organize the teaching of a unit of work or a unit of evening instruction.

As to the success of this first enterprise, assurances have been given by the teachers who have taken the

course and by the management of the school, that it has been worth while. There is room for a very great deal of improvement. The experience has been profitable and advantage will be taken of the improvements in continuing this work for another year. It is expected, by reason of the reports of each evening, to formulate this material into a correspondence course which can be used with follow-up in schools where there are only one or two who are required to take this work.

The writer is satisfied that the policy of the State Department of Education, in requiring this training, is sound, and that there is no serious difficulty in carrying out the requirement; that evening-school teachers worthy of employment and whose standards are high in their own field of occupation, gladly accept an opportunity of this kind for training in the best methods of teaching. It makes their work easier and more effective and more satisfactory to themselves. Any evening-school teacher who is not interested in this opportunity for self-improvement in the methods of handling men and women is not the type desired in the evening schools.

It is believed that much better results would be gained by setting aside one whole evening each week for at least two hours, for a total of 36 hours for giving this instruction. This, in fact, is all too limited a time to cover the minimum essentials necessary for the successful teaching of adults. It is possible, in the employing of evening-school teachers, to have a clear understanding of this requirement and its advantages. No doubt it would be accepted gladly by prospective evening-school teachers. The work could then be programmed to permit this period of training.

It is expected to carry this work on further next year and test out correspondence training in cooperation with a close "follow-up." This would be supplemented with institute and group training wherever possible. This program should result, eventually, in securing much higher grade and more effective evening-school teachers with higher standards of work than is at present possible. It is believed also that the problem of adult teaching will require the regular day-school teacher who undertakes this type of work to take special courses in the training of adults. Likewise, the supervisor, principal, and administrator of our evening schools will need to be further educated to the value of trained teachers for teaching adults.

N. B. V. A. Goes Visiting

The Mare Island Navy Yard was the center of attraction for the March meeting of the North Bay Vocational Association. The entire afternoon was spent in visiting the various shops and departments under the leadership of competent guides who explained the processes and activities.

The mold loft, shipwright shop, blacksmith shop, boiler shop, machine shop, pattern shop, paint factory, dry docks, and apprentice school were visited. After dinner at the Casa de Vallejo Hotel, Captain Fisher, U. S. N., addressed the association on industrial relations.

The April meeting was held at Concord High School. An opportunity was afforded the members of the association who attended this meeting to visit the refinery of the Associated Oil Company.—W. C. GARCELON, Secretary.

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WHAT HARM ADMISSION REQUIREMENTS!

The University of California has recently adopted a new plan of admissions which is bound to have an effect upon secondary vocational education programs throughout the state. Some feel the effect will be harmful to vocational education. Others view the new requirements as

distinctly advantageous to the development of a more effective program of vocational education and guidance. The writer is one who believes that, rightly interpreted, the plan will result in great good to the cause of real vocational education. It is from this point of view that the following paragraphs are written.

One of the severest handicaps operating to defeat the working out of a completely effective vocational program in California, as well as in other states, has been the tendency to think in terms of what might be called a bifurcated scheme of education. Vocational educators have been faced with the accusation that a boy trained in a Smith-Hughes class in agriculture, for example, was not adequately prepared for entrance to the University. Whether or not this accusation is justifiable, the writer is not prepared to defend or deny, nor does he know of any investigation to which he could turn for adequate justification of either view.

The reactions of vocational educators have been of two types. There has been an emotional response similar to that which animates a parent when his only child is criticized. We have resented the implication that vocational curricula were inferior to college-preparatory curricula. We have been indignant that apparently all but vocational instructors are agreed that a first-class student is wasted in a shop or an "ag" course. Our comeback has also been emotional. We have retaliated by castigating our critics with beliefs instead of facts; with counter-accusations instead of cooperation. And we have been largely unsuccessful, whenever such tactics were pursued, in making a discernable impression on the situation.

Our second response has been one of expediency. Because our students were not admitted to the University, on the basis of complete and satisfactory performance in vocational curricula, we have in effect emasculated those curricula by substituting therein a sufficient number of college-preparatory subjects to make it possible, under the old "recommending" scheme, for one who might desire to go to college to qualify. Thus has emerged the "bifurcated" program—one supposedly two-aimed but, in reality, aimed at neither college nor vocation. For we can no more serve two masters in education than in religion. We should not be surprised that students entering the University with programs partly academic and partly vocational should have made a poor showing in comparison with students who had taken the accepted college-preparatory course. We should certainly expect such students to make a poor showing in industry in comparison with students who had devoted full time to a vocational program preparing for a given occupation.

We need to admit that we are primarily interested in the child who has no intention of entering college, but who plans definitely to enter productive life when he leaves our classes.

We need to reiterate with fervor the need for pointedness in education, all education as well as vocational education.

We need to recognize the inescapable fact that we cannot hope to achieve diverse objectives by a compromise program.

We need to see clearly that he who undertakes a vocational curriculum and later decides to go to the

University is exactly in the same situation as a motorist who chooses to turn to the right and later decides he should have gone straight ahead. There is no way out of the situation except to return to the point at which the roads branched, or to cut across by a diagonal highway. Time will be lost because of the wrong decision; there will be wear and tear on the machine, and more gas will be required. But the motorist will have seen more country; he will have gained more experience; and he will know, with greater certainty, that he is on the right road at last.

We need to remember that he who chooses to go to college, and later decides to take a vocational course will receive very little credit toward the completion of the actual vocational requirements of the occupation he has elected to follow. No matter how excellently he has mastered his French, if French has no bearing on proficiency in his future vocation, he will escape no legitimate obligation of that vocation by virtue of his knowledge of French. Any other point of view is ridiculous to the true vocational teacher and we must not forget that it works both ways.

What are the new admission requirements of the University of California?

I. Evidence of the candidate's graduation, with not less than 15 units of credit, from an accredited secondary school of California.

II. The completion of the following list of subjects which, in the opinion of a committee representing both the University and the high school principals, represents the most important prerequisites for university work:

	Units
(a) History	1
(b) English	3
(c) Mathematics (elementary algebra and plane geometry)	2
(d) Chemistry, or physics, or biology, or zoology, or botany (if a third year or fourth year subject with laboratory)	1
(e) Foreign language (in one language)	2
(f) Advanced mathematics; or chemistry, or physics (if not offered under (d)); or additional foreign language in the language offered under (e) (if in another foreign language, 2 units will be required)	1 (or 2)
(g) Electives from the following list: History, English, mathematics, natural science, foreign language, drawing	2 (or 1)
(h) Unrestricted electives	3
Total required for admission	15

III. Evidence that the candidate has a high-school record of grades "1" or "2" in at least 10 of the 12 units specified in (a)-(g) inclusive in II above, and no grade lower than "3" in any of the 15 units.

It is further provided that students having deficiencies may remove them by entrance examinations in those subjects in which they are deficient.

How is such a plan of admissions an advantage to the vocational program? In the first place it is specific. There is now no question, so far as the University of California is concerned, as to the program to be followed if one wishes to enter that University. The immediate vocation for which one must prepare if he contemplates

entering the University of California is studentship in that University. The preparation necessary has been stated in clear terms. There is no longer any imagined necessity for the teacher of Smith-Hughes agriculture, for example, to concern himself with whether or not his program is of college-preparatory calibre. He can give his undivided attention to making his program definitely and strictly vocational, which is what the best agricultural teachers always have done. If a student sometime later desires to use three of the units earned in vocational agriculture towards his unrestricted electives he is free to do so, the only requirement being that he should have received a grade of "3" or better therein.

The second consideration grows out of the first. Because of the specific preparation necessary a student must now choose whether or not he is going to the University. Because the preparatory program is comprehensive that choice must be early rather than late. The whole problem of vocational choice will be vitalized by the increased necessity for careful and early decision. Hitherto it has been possible for a student to dawdle while pursuing what has been termed in this paper the "bifurcated" type of program. In the future such a waste of time ought to disappear rapidly. It is certainly not unreasonable to expect a much richer program of vocational guidance to grow throughout the high schools of the state as a result of such a scheme of admissions as has been described.

Some vocational instructors will say that the new requirements will mean decreasing enrollments in our vocational classes. If they result in eliminating those who have no intention of following the trade they are being taught, so much the better. If they force into the college-preparatory curriculum those who actually intend going to college, so much the better. Let us have done with this lack of pointedness in education and let us welcome this device as one which will help to achieve pointedness to a degree far greater than now exists.

It seems reasonable, too, to anticipate that although there may be a decrease in enrollment in vocational curricula in the first two years of high school there ought to be increase in the upper years. Many may think they are going to the University when they enter high school who will know after a year or so that they have chosen carelessly or unwisely. To all such a vocational curriculum will be the logical program to which to change. They will enter such a curriculum with maturity and definite purpose, untinctured by dreams of going to college. They will be old enough when they have finished the program to enter employment. It ought to be possible under such conditions to come much nearer to the results which real vocational teachers desire to achieve.

It should be said in conclusion that "admission requirements" ought not to be confused with "high-school graduation requirements." This paper has dealt with the first subject only. It is sufficient to say here that the time has long since passed when the term "high-school graduate" applied only to the person who had finished a college-preparatory course. It is just as legitimate to award a high-school diploma to a boy who has, with satisfactory performance, completed the course of training for the trade of electrician, as it is for the University to award a degree to the electrical engineer.—EDWIN A. LEE.

Plans for Summer Conference

By E. E. ERICKSON

Chairman Publicity Committee, C. V. A.

The dates for the summer conference of the California Vocational Association have been changed to August 2 and 3. This change was necessary in order to accommodate members from the northern part of the state, particularly from the Bay Section, where the opening of schools would have interfered with attendance upon the convention on August 12 and 13, the dates previously suggested.

The meeting now falls on Friday and Saturday, and is so timed, it is hoped, that all vocational teachers and administrators will find it convenient to attend. The summer conferences of this association have proved immensely practical and helpful in the past. The one now being planned should excel all others, both with reference to attendance and type of program. The convention will open at 10:30 on Friday morning, August 2, with a general meeting in the new auditorium of the Santa Barbara State Teachers College. Another general assembly will be held on Saturday morning. Both Friday and Saturday afternoons will be devoted to sectional meetings, the Saturday afternoon program leading up to the annual business meeting at 3:30 o'clock.

Sectional Programs

Sectional programs will be planned for the following groups: (1) agricultural education; (2) commercial education; (3) home economics education; (4) industrial arts education. (5) part-time education; (6) rehabilitation; (7) trade and industry; and (8) vocational guidance. It has been suggested that, in all these sections, the programs be so planned as to be directly helpful to the teacher in service. In order to accomplish this the committee is endeavoring to use teachers from the ranks for the various presentations, thus enabling the groups to engage in conferences and discussions. A place has been made on the Saturday afternoon program for a talk by John C. Beswick, chief, Bureau of Trade and Industrial Education, State Department of Education, covering requirements for credentials.

A questionnaire has been sent out by the program committee to ascertain just what type of program is most desirable for each section. Responses are welcomed by the committee for these suggestions, many of which have already been received, will be valuable in shaping the final programs.

For the general meetings it is expected that Charles A. Prosser, director of Dunwoody Institute, Minneapolis, Minnesota, will be one of the principal speakers. Dr. Prosser's contribution, alone, will be worth coming a long way to hear.

The Banquet

The annual banquet, which has become a regular feature of the C. V. A. conventions, will be held on Saturday evening. There will be a program of music and brief speeches; this will be followed by a social hour, with dancing, according to the present plans of the banquet and program committees.

Already Santa Barbara, through its local committees, is making definite plans for receiving and entertaining delegates and visitors. Realizing that the spirit of recreation and good fellowship should be given consideration, the committee has not scheduled professional meetings for Friday evening. Although complete plans have not yet been made for that evening, there is every promise of a splendid entertainment program which will give a glimpse of Santa Barbara's hospitality to visitors.

To carry out further the recreational side of this convention, the entertainment committee has planned to continue its care for the guests over

Sunday. Sight-seeing trips are being planned for the day. On such trips the visitors will be guided to interesting places, often inaccessible to the casual traveler, full of charm and color in their expression of the "spirit of Santa Barbara."

The State Teachers College will provide space for the meetings. The general program committee which is headed by Fred E. Brooks of Huntington Beach promises a program of more than usual interest.



ENTRANCE TO SPANISH CLOISTER AND COURT, STATE
TEACHERS COLLEGE, SANTA BARBARA

What Others Say About the C. V. A. Conference

It is a rare privilege which the Santa Barbara State Teachers College will have on August 2 and 3 of this year. At that time the California Vocational Association will hold its annual meeting, with this institution acting as host. Not only is the college honored by this opportunity, but also the school system of the city. City officials and the Chamber of Commerce are interested in the coming of this representative group of school people of the state, and will do all in their power to cooperate with the college in providing a real welcome to the guests. It is hoped that the visitors, in addition to attending well-planned meetings, may have some time available for enjoying the beautiful setting of the city, the beaches, the islands, and the near-by mountains. It is hoped that all who come may have the greatest possible pleasure and profit from the occasion.—C. L. PHELPS, President State Teachers College, Santa Barbara.

The Santa Barbara Vocational Association is already making extensive preparations to entertain the third summer conference of the C. V. A. at Santa Barbara State Teachers College, August 2 and 3. In cooperation with the officers of the state association it is hoped that the conference will be outstanding, not only from a professional viewpoint, but also for its social contribution.

The entertainment committee is making plans to fill the time, not spent in conferences, with pleasure for all. Men are urged to bring their wives and families. A dance is being planned, and sight-seeing tours, under the auspices of the Chamber of Commerce, will be conducted through Montecito and some of the world-famous estates. Mountain and beach trips, fishing, bathing, boating, and other pleasures are being planned for the visitors. Then, during the week following the conference, Santa Barbara will celebrate the now-famous Old Spanish Days Fiesta, an exotic and interesting event. Plan your vacation so as to remain here for the week!

The accommodation committee will have information about the interesting and inexpensive auto camps and apartments, as well as high-class or moderate-rate hotels. Let us know your wants and we will be happy to help you find just the kind of accommodation you desire.—ROY L. SOULES, President Santa Barbara Vocational Association.

Every industrial and vocational teacher in the state of California should avail himself of the opportunity to attend the meeting of the California Vocational Association to be held in Santa Barbara this summer.

Those of us who have attended all of the meetings of the C. V. A. since its organization, realize how valuable the meetings have become. The convention at Berkeley set a high mark for future meetings to equal. There is no doubt but what the Santa Barbara convention will eclipse all former meetings.

Combine attendance at the C. V. A. with your vacation in Santa Barbara—one of the beautiful vacation spots of California!—LYNN E. STOCKWELL, director Vocational Education, Fresno.

When the American Vocational Association met in Los Angeles, the California Vocational Association was the

largest state association in the United States. We should continue to maintain that proud position against the time when the A. V. A. will return to the west. Nothing is more conducive to morale than attendance at the state convention. Here old friends renew their comradeship, new friends are made, experiences are interchanged, speakers bring not only inspiration, but a host of new and practical ideas. The result is a renewed enthusiasm for the work one is doing and a knowledge that not one, but an army is serving the cause of vocational education.

The Santa Barbara meeting of the C. V. A. promises to be a high light in such conventions. It comes at a strategic time—just before the beginning of a new year's work. Its program will be rich in carefully selected topics discussed by capable individuals. No vocational teacher should permit himself to be absent.—EDWIN A. LEE, director Division of Vocational Education, University of California.

CONVENTION COMMITTEES

LOCAL CHAIRMEN, SANTA BARBARA

CENTRAL COMMITTEE

Roy L. Soules, 1235 Chapala Street
Emanuel E. Erickson, State College
James A. Woods, 319 West Olivos Street

Publicity

E. E. Erickson, State College, Chairman
L. L. Ingraham, 210 West Micheltorena Street

Program

Roy L. Soules, 1235 Chapala Street
Alice V. Bradley, State College

Accommodation

Francis W. Noel, 1516 San Andres Street
Mrs. Olive S. Johnston, 628 E. Sola Street

Exhibits

Rene P. LeFevre, 1825 Sunset Avenue
Mrs. Isabel M. Fish, State College

Entertainment

Fred H. Pierce, Mission Canyon.
Mrs. Ethel H. Strain, 1326 Alta Vista Road

Music

Raymond J. Casey, Los Angeles

Banquet

Marie T. Hennes, 1637 Loma Street
C. V. Denman, 1235 Chapala Street

Reception

Charlotte T. Ebbets, State College
E. H. Harlacher, 1800 Delavina Street

Information

Winifred M. Frye, State College
Fred E. Brooks, Box 185, Huntington Beach

GENERAL PROGRAM COMMITTEE

Fred E. Brooks, Chairman
G. A. Estabrook, 765 Cherry Avenue, Long Beach
Park Hyde, 5934 Great Oak Circle, Los Angeles
Laurine Broadwell, City Vocational Department, Los Angeles
Fred Jacobs, Chaffey Union High School, Ontario

Exhibit Committee

George D. Henck, Chairman, 320 Walnut Street
Franklin C. Webber, Belvedere Junior High School, Los Angeles
Morgan N. Smith, 2069 W. Mountain, Glendale

Upon Attending the A. V. A. Convention, 1928

By RALPH W. HEYWOOD

President California Vocational Association

It is with pleasure that I shall endeavor to convey to the members of the California Vocational Association something of the spirit of the American Vocational Association meetings in Philadelphia, and the trade schools visited enroute. The great industrial district, surrounding Philadelphia, gave an excellent opportunity for illustration of what seemed to be the main theme of the convention, especially the industrial education section, "The Training of Apprentices on the Job."

Various phases of the problem of apprentice training were ably presented by many types of agencies at work in industrial plants; these agencies were the educational directors, plant-training engineers, and officers and directors of corporations. The industrial education section was opened by Charles A. Prosser, director of Dunwoody Institute. He presented a report on "A Program for Employed Youth," saying that those interested in child labor forgot that the youth who dropped out of school was in need of help as well as the youth who was reached by compulsory laws. The main problem stated in his report was that one of the most vital tasks before the country was the conserving of workers under eighteen years of age.

A number of speeches were given by men in charge of apprentices, either in the school or in industry, showing the vital points in the system of training. These articles are appearing from time to time in the "News Bulletin" of the American Vocational Association and therefore will not be reviewed here.

School Visits

Through the courtesy of the Los Angeles Board of Education and Superintendent Susan M. Dorsey, drafting classes and trade schools in the following cities were visited: Philadelphia, New York, Washington, Pittsburgh, Detroit, Milwaukee, and Chicago. One of the most interesting schools visited was the Henry Ford Trade School in Detroit. This school, under the direction of F. E. Sarle, is an interesting experiment in vocational training. The school occupies three acres of floor space, and enrolls 3500 apprentices. The students are on pay, and have 150 competent instructors. Courses are offered not only in the trades, but also in engineering, and in work related to the trades where instruction is organized in lesson sheet form. All work in the shop is on a production basis. In order to encourage the students to develop the habit of thrift, \$2.00 a month, in addition to his scholarship, is given to each boy. This fund must be deposited in some bank and kept there as long as the boy remains in school; the bankbooks are submitted to the school monthly for examination.

At noon a hot lunch is furnished to each student. This, with two cash gifts, makes a boy's minimum rate \$450 a year, and the maximum \$1020. During the academic week the boy attends class only. The entire course includes:

English	Physics
Mechanical drawing	Chemistry
Civics	Qualitative analysis

Automechanics
Commercial geography
Arithmetic
Algebra
Geometry
Trigonometry

Quantitative analysis
Metallurgy
Metallography
Shop theory
Textiles

The boy who wishes to attend college, or the University of Michigan, for engineering takes history and foreign language in some other school. Many of the boys are following this plan.

When a boy first enrolls he is always placed on simple operations and is kept on this work until he becomes, in a measure, accustomed to machinery. He is then transferred to work on a shaper, lathe, milling machine, grinder, and bench. As far as possible, boys are also given an opportunity to work in the following departments:

Forge work	Nickel plating
Diemaking	Valve repairing
Gaging	Car repairing
Hardening	Wood and metal patternmaking
Foundry work	Carpentry
Sheet metal work	Tool repairing

Sketches from models and drawings, from the standpoint of related work, are carried on in the school in an efficient manner. The apprentices actually sketch and draw the most modern parts of cars, making drawings which, in a few weeks, they read while producing parts on the machinery. Drafting is required throughout the three years of apprenticeship.

In the shop each job is done on production order. An expert estimates how many hours it would take a skilled mechanic to complete the work. An accurate record is kept and boys and instructors try to come within the estimate. Over a period of years the percentage of excess time required has varied greatly, rising to 60 per cent and sinking to 13 per cent. The average is about 25 per cent more than the time required by skilled men.

In all this training the school holds the following ideals before the boys in the shop and, as far as possible, in the classroom: cleanliness and safety, then accuracy. Slow accuracy is no longer valuable, so speed in accuracy is the fourth requisite. Fifth is originality—the ability to develop better methods and better work. If a student is satisfied with what his instructor can show him, he can never know the greater satisfaction of producing something better, or something in a better way.

Join the C. V. A.!

It is to be regretted that the A. V. A. News Bulletin for February, 1929, shows California with only 140 members. Unfortunately, the California secretary did not have complete returns from all the sectional treasurers at the time of the national convention, so our full membership does not appear in the bulletin. We now have a total of 450 members and hope, before summer, to reach 800. It appears that we have dropped from first to sixth place in the national list of state organization memberships. Does this mean that our society can hope for a whole-hearted support only in the years in which we have

a national convention in the state? Surely we do not need this incentive each year to make the C. V. A. a permanent organization which can represent the professional spirit of all vocational groups!

Put your interests behind your local clubs and organizations, and promote affiliation with a strong, central state society which can achieve for our vocational group successes which individual persons or groups can not achieve! If you have not secured a copy of the newly printed constitution, or have not had an opportunity to join a local section of the C. V. A., write to Dwight R. Rutherford, secretary and treasurer, Petaluma High School, Petaluma, California. This invitation applies to all the following groups of teachers throughout the state: agriculture, commerce, home economics, industrial arts, part-time education, rehabilitation, trade and industry, and guidance.

The next state conference will be held in Santa Barbara, in conjunction with the State Department of Education, at the State Teachers College, on August 2 and 3. Plan to attend and take an interest in the business meetings as well as the other meetings of importance!—RALPH W. HEYWOOD, president California Vocational Association.

Summer Session Courses in Los Angeles

The complete curriculum for training trade and industrial teachers is offered only at Los Angeles during the 1929 summer session; in addition, certain up-grading courses, open only to individuals who have completed the requirements for the vocational arts credential will also be offered. The summer session courses of instruction for training trade and industrial teachers are designed primarily to prepare men and women for service in vocational schools and departments maintained under the provisions of the State and Federal Vocational Education acts.

Persons meeting the requirements who desire to begin their teacher-training work will be required to take courses 361, 362, and 364. Candidates who have completed the first half of the teacher-training program in either of the centers maintained by the University of California will take courses 365, 366, and 367, and in certain cases, S164. The courses offered at Los Angeles are as follows:

- 361. Occupational analysis and curriculum construction. Mr. Johnson, Mr. Waidelich.
- 362. Technique of vocational instruction. Mr. Johnson, Mr. Waidelich.
- 364. Theory and administration of vocational education. Mr. Keinholtz.
- 365. Problems of trade technical instruction. Dr. Horridge.
- 366. Part-time, cooperative, and trade extension education. Mr. Stier.
- 367. Civic and employment relations. Mr. Mann.

Advanced courses are offered for the holders of the vocational education credential who have completed 16 units of the teacher-training course. Course 363, Analysis and Organization of Related Technical Curricula, when completed, entitles the candidate to the credential for giving full-time instruction in related technical subjects. This and other courses recommended for the long-term credential, are as follows:

- 363. Analysis and organization of related technical curricula. Mrs. Donovan, Mr. Walton, Mr. Wright.
- 169. Problems of the coordinator. Mr. Stier.
- S160. Vocational education: general course. Mr. Mann.
- 161 1A. Industrial arts. Mr. Nihart.
- S164. Vocational guidance. Dr. Horridge.

Further information concerning any phase of the program may be obtained from Benjamin W. Johnson, Assistant Director of the Division of Vocational Education, University of California at Los Angeles, California.

Leadership Courses in Vocational Education, Berkeley Summer Session

In accordance with a recently emphasized policy of the Federal Board for Vocational Education and of the State Commission for State- and Federal-aided classes, courses designed especially for leadership in vocational education are being offered at the summer session in Berkeley this year.

The courses have been especially designed to meet the needs of administrators and leaders in the field of vocational education, as well as to give others interested an insight into the problems of directing and teaching vocational classes. Nearly all courses carry credit toward the credentials set up by the State Department of Education for administrators and supervisors of vocational education.

The leadership program outlined in the courses listed below should appeal to all vocational teachers who possess the vocational arts credential, to heads of vocational departments, supervisors and directors of vocational education, principals of vocational schools, and part-time and evening schools, and principals and superintendents who desire to understand the problems of vocational education. Courses in vocational education at Berkeley are as follows: S160. Vocational education: general course.—Dr. Ricciardi. 163AE. The place of vocational education in the general field of adult education—Dr. Lee, Dr. Prosser, Mr. Travers.

- S164. Vocational guidance.—Mr. Campion.
- S260A. Seminar in vocational education.—Dr. Palmer.
- 167S. Administration and supervision of vocational education.—Dr. Prosser, Mr. Campion.
- 163. The vocational education survey.—Mr. Travers.
- 167C. Cooperative vocational education.—Dr. Ricciardi.
- 163C. Construction of vocational curricula.—Mr. Mallary.
- 168. Principles of conference leading.—Mr. Mallary.
- S162. Part-time education.—Dr. Palmer.
- S165. Principles of commercial education.—Dr. Kibby.
- 161C. Current problems in commercial education.—Dr. Kibby.
- 362r. Methods in teaching typewriting.—Assistant Professor Whillock.
- 368c. Demonstration class in teaching typewriting.—Assistant Professor Whillock.

Further information and a leaflet giving a full description of courses may be obtained by addressing the director of the Division of Vocational Education, University of California, Berkeley, California.

Aviation.—The Bureau of Attendance and Guidance of the San Francisco School Department has published the first of a series of occupational studies to aid pupils in the selection of an occupation. This bulletin is entitled, "Aviation: a study for the high-school and junior high-school students of San Francisco." Elizabeth K. Livermore is the author of this publication.

Aviation is a subject which readily appeals to the imagination. Many pupils who are ambitious to become aviators have little or no knowledge of the opportunities, qualification requirements, or difficulties in aviation or its related industries. Studies of this kind which give much exact information are of great value.

Home Economics Majors for Graduation from California High Schools

By MAUD I. MURCHIE

Chief, Bureau Homemaking Education, State Department of Education

Just preceding the sessions of the High School Principals' Convention, held in Oakland, March 25-29, 1929, a study of the status of the home-economics major in the state was made to ascertain the degree to which it has been accepted by school officials during the year following the approval by the State Board of Education of a second major for graduation selected from any of the school subjects listed for high schools in the state law. The following data indicate an endorsement of the major and a decided inclination to accept a broad selection of subject matter in homemaking for the major.

Response to Request for Information

Of the 355 high schools in the state (exclusive of junior high schools and a few others, such as schools of commerce or schools enrolling boys only) which should have been reached by the questionnaire, all but 51 promptly returned the form with very satisfactory data and, in many cases, with explanatory remarks which were useful in evaluating the evidence. Of these 51 schools it is the judgment of the chief of the Bureau of Homemaking Education that approximately 25 per cent probably either offer majors in home economics or are in a position to do so. Of these 51 schools, also, 10 are too small to offer any instruction in homemaking subjects.

Schools Offering Home Economics Majors

Of the 304 schools returning data, 91 reported that it was not feasible to offer majors due to limitations of enrollment, housing facilities, and so forth. However, all but 10 offer instruction in homemaking subjects. These schools, because of size, can not offer such instruction. Majors are reported as offered in 168 schools, and 17 schools reported that they were contemplating the offering of majors in the near future.

Scope of Majors

An examination of the content offered to satisfy the major requirement indicated an acceptable breadth of subject matter covering many of the essentials of homemaking. In approximately 44 per cent of the majors reported there probably should be a broadening of the scope to include instruction in more of the responsibilities and duties of the home than one might assume are included in the reports.

Only six persons questioned, or expressed a disapproval of the major in home economics for graduation, while 281 registered an approval, and several stated their approval very emphatically.

A Local Requirement of Home Economics

In 84 schools, a course in home economics is a requirement for graduation. In most cases the requirement consists of both foods and clothing, one-half year of each, and in several schools a number of other home problems or activities are included. In a few schools students may select any home economics course offered in the school. The varied program is a commendable practice. In addition, 12 schools volunteered the information that they approved of requiring home economics for graduation and were planning to initiate such a program.

Eight other schools reported that they had no requirement of the subject, but that all of their girls enrolled in the home economics classes for at least one year. One school reported that every girl had taken the work for the past three years for at least a year without a requirement.

General Recognition of the Subject

A perusal of these data must convince one that the subject of homemaking is generally recognized by the school administrators and the public as basic in the education of girls. It is a challenge to home economics teachers to see that the subject is broadly presented with emphasis on the essentials of the field, taught in a vital manner in keeping with standards and practices that are not beyond the appreciation and attainment of their community, and specifically adapted to the interests and personal lives of the girls.

A STUDY OF APPROXIMATE ENROLLMENTS

Status of courses in home economics	Number of schools	Approximate number of girls enrolled in schools
None offered.....	20	691
Required for graduation (number reporting).....	84	23,963
Planning to make requirement for graduation (number reporting)...	12	1,783
Not required, but all girls enroll in home economics.....	8	1,022
		Total 26,768
Offered as major (reported).....	168	55,597
Planning to offer majors in home economics.....	17	2,648
Not replying, but probably able to offer major; or are doing so.....	13	7,853
		Total 66,098
Not now possible to offer major in home economics.....	91	7,368
Not replying, but probably unable to offer home economics major....	38	2,987
		Total 10,355

It will be noted from the enrollment table that approximately only 691 girls are enrolled in schools where no home economics instruction is offered. Approximately 26,768 girls are enrolled in schools where home economics is required for graduation or soon will be. Approximately 66,098 girls are enrolled in schools where probably a satisfactory major may be selected in home economics. Approximately 10,355 girls are enrolled in schools where it is hardly possible to organize a major in home economics because the size of the school imposes too many limitations. This group includes the schools, 20 in number, offering no home economics.

These enrollment figures were secured by taking 50 per cent of the total enrollments given in the high school directory for 1928-29, since the sexes are about evenly distributed in number. Since this is the first year it has been possible to organize majors of this type, no effort was made to secure figures giving the number of students actually taking a major in home economics.

Institutions Offer Home Economics Courses

The following courses are announced in the bulletins of the respective teacher-training institutions listed below as summer-session offerings, according to Maude I. Murchie, Chief of the Bureau of Homemaking Education, State Department of Education. The courses will be of interest to teachers of home economics subjects in the public schools, who might wish to extend their scope of learning, and to qualified persons who might wish to begin a program of training in this special field.

SAN JOSE TEACHERS COLLEGE, JUNE 24 TO AUGUST 2

Art	12A. Color and design
	151. Block printing
Homemaking	3. Elementary nutrition and dietetics
	12S. Home cookery and table service
	109. Textiles
	111S. Cafeteria management
	118S. Tailoring and advanced dress-making
	132S. House decoration and furnishing
	149. Problems in homemaking education
Natural science	Chem. 10S. Chemistry of everyday life
Student health	110. Teaching of health education

UNIVERSITY OF CALIFORNIA, BERKELEY

JULY 1 TO AUGUST 10

Art	6A. Color and design
	S131A. Landscape composition
Household science	S1B. Elementary food study
	2. Elements of nutrition
	S100. Food economics
	S130. Nutrition of development
	S199. Special study for advanced undergraduates
	S214. Research
Hygiene	S101. Child welfare

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

JULY 1 TO AUGUST 10

Art	2A. Art structure
	133. Costume
Home economics	1A. Clothing
	32. Elements of nutrition
Hygiene	S101. Child health
	S147. Principles of health education
	148. Procedures in health education

LELAND STANFORD JUNIOR UNIVERSITY

JUNE 20 TO AUGUST 31

Graphic art	3. Design in form and color
	5. Art of house design
	7. Landscape
	103. Advanced color design
	105. Advanced course in art of the house
	106. Advanced course in the history of painting
	107. Advanced landscape

UNIVERSITY OF SOUTHERN CALIFORNIA

JUNE 17 TO AUGUST 9, JULY 1 TO AUGUST 9

AUGUST 12 TO SEPTEMBER 3

Agriculture	150F. Home gardening and landscaping
Education	135. Pre-school education
Sociology	104. The family as a social institution

HUMBOLDT STATE TEACHERS COLLEGE, ARCATA

JUNE 24 TO AUGUST 2

Education	Children's literature and story telling
	Growth and development of the child
Home economics	Nutrition

STATE TEACHERS COLLEGE, SAN DIEGO

JUNE 24 TO AUGUST 2 AND AUGUST 5 TO AUGUST 27

Education	CXXVI. Children's literature and story telling
	CXXXI. The pre-school child
	CLIX. Growth and development of children
Home economics	S50. Nutrition
	Pre-natal instruction and infant diet
Red Cross 1	Home hygiene (3 weeks)
Sociology	S120. The family

STATE TEACHERS COLLEGE, SAN FRANCISCO

JUNE 24 TO AUGUST 2

Psychology	S107. Growth and development of the child
	S117. Mental hygiene
Home economics	S3A. Food and nutrition

Summer-session catalogues have not, at this time, been received from the teachers colleges at Chico and Santa Barbara. Both of these institutions will doubtless provide similar courses of interest to home-economics teachers and to those interested in home-economics education. For instance, it is known that Miss Margaret Trilling of Carnegie Institute, and formerly of the University of Chicago, a writer of texts in clothing and textiles, will offer at Chico summer session at Mount Shasta a course in methods in home economics.

Bay Section of C. V. A. Meets in San Jose

San Jose city schools and San Jose State Teachers College acted as hosts to the Bay Section of the C. V. A. on March 16. More than 300 teachers attended the conference held at the college. Walter Bachrodt, city superintendent of schools, welcomed the visitors; and T. W. MacQuarrie, president of the State Teachers College, gave the opening address on "The Technical School and its Job."

In the afternoon, sectional conferences were held by each of the groups composing the association. The presiding officers at these conferences were: Richard Werner, agriculture; Dr. Elmer Staffelbach, commerce; Miss Marian Matricia, evening school; Miss Gladys Nevenzel, home-making; James McDonald, industrial arts; Mrs. Margaret G. Lomax, part-time and vocational guidance; and Donald Biery, trade and industrial.

In the latter part of the afternoon members were taken on the blossom trip through the Santa Clara Valley. The conference closed with a banquet and dance in the evening. Dr. Nicholas Ricciardi, chief, Division of City Secondary Schools, State Department of Education, gave the address at the banquet on the vocational education teacher of the future. Dr. Elmer Staffelbach, head of the commercial department of the State Teachers College acted as toastmaster.

Guidance Through the Curricula of the Part-time School

By SARAH B. CROSBY

Coordinator, San Diego Part-Time High School

It has been said that the ideal size of a part-time class is one student. The significance of this statement lies in the fact that in part-time-school work boys and girls, and not subjects, are considered of fundamental importance. Part-time education must always be "self-realization through personal effort in a real world."

A clear idea of how the part-time high school attains its educational and vocational objectives may be obtained from a brief picture of the organization of a part-time high school. The administrative force of such a school must include persons equipped to handle the problems of counseling; job-placement; and coordination between the child and the home, the child and the school, and the child and the job. Such counseling and coordination may be done by teachers who also engage in classroom work, or it may be done by persons who devote all of their time to this function. Whether counseling and coordination is done by teachers or by special counselors or coordinators is usually a matter of administrative policy. Both plans have, under favorable circumstances, been found successful.

Adaptations in Curriculum

Probably most part-time high schools have, as has the San Diego Part-time High School, four main departments: commercial, academic, industrial arts, and home economics, which are, however, not separated by hard and fast lines, nor is the instruction in any department restricted closely to its single field. In some high schools, for example, beauty culture is included in the home-economics department. In short, the aim of any department in a part-time high school is to give to each student what he most needs in the four hours or more in which he attends school each week. Units, conventional curricula, and even departments of instruction are disregarded when necessary. The commercial department offers work in typing and book-keeping, and other commercial subjects which the student needs, and which the school can offer, but instruction is usually an individual matter as each student's needs are likely to differ from those of his classmates, either because of the time of enrollment or the choice of work.

The instruction given to one student in San Diego is an illustration of the adaptation of instruction to individual needs: Jack had to leave regular school in order to support his mother and sister. A very good job as bookkeeper was open to him through the school employment office. However, Jack knew almost nothing of book-keeping and it was therefore arranged with his employer to allow him a try-out period on the job while he received instruction in bookkeeping. It was agreed to have him bring the company's books to school for four hours each week in order that he might receive the aid of the commercial teacher in learning to keep this particular set of books correctly. The plan worked out successfully for every one concerned and Jack is now studying advanced bookkeeping in the part-time high school and commercial law in the evening high school.

In the academic department may be found all types of students and almost any subject being taught. In a

group whose grade accomplishment was found to range from the second to the twelfth (although the chronological ages were from 14 to 21) and whose IQ was found to lie between 54 and 145, the diversity of tastes and needs is great. A few students wish to be coached in high school subjects in which they have failed for one reason or another. In such cases it is the business of the school to help them not only acquire credits but, what is more important, to acquire a definite attitude towards school. On the other hand instruction closely related to the trade may be given in this department; we have several "exercise boys" from a nearby race track who come to read books on horses or sportsmanship.

The industrial arts department in many schools also teaches courses varying from hobbies to real trades. At present this department in San Diego offers courses only in woodshop, radio construction, and shoe repair. In larger part-time schools a much wider range of offerings in technical courses is provided for part-time students.

In the home economics department of the San Diego Part-time High School courses in nutrition, meal service, household sewing and home decoration are offered. In addition there is a married girl's club which is a club for young married women who are not yet 18 years of age, but who have left full-time school. Their instruction includes as many fields of information concerning home and marriage as time will allow. Home cooking, sewing, practical nursing, pre-natal care, and baby-hygiene are the regular topics, but much individual counseling is also given. Many of these young wives and mothers have serious problems to face. A 17-year-old widow with a baby may need help in selecting a vocation which will allow her to remain with her baby. Another girl may need help in the problem of adjustment to others in the home, a young wife may wish to know how she can best help her husband in business.

Counseling in and out of School

In reviewing the whole field of work covered by the part-time high school, counseling stands out as the most important function of every department of the school. Counseling and guidance may be given at the home of a student when the coordinator or teacher calls, or it may take place at school when the principal, teacher, or counselor has opportunity, but no matter where or how counseling is given, it is always the most vital part of the work of the school.

Guidance, to be effective, must carry over outside of the classroom. In fact, much of the vocational, some of the pre-vocational, and a little of the actual instruction is often carried on outside of the high school building. By this means the variety and range of work offered by the part-time school can be almost indefinitely extended.

Through the cooperation of the full-time schools part-time school students are programed for classes in printing, machine shop, sewing, shorthand, and other subjects which the part-time school does not or can not offer at the hours when the student attends. In this same way, part-time school students are offered advanced work in any strictly

academic subject. Also, the head of the visual education department has allowed several boys, interested in commercial photography to spend four hours a week in the laboratories of his department; and the music supervisor has made provision for special work in music for part-time-school students who showed ability or interest along this line.

Instruction on the Job

Often it is desirable to offer instruction which the school department cannot provide, and arrangements are then made to secure this instruction "on the job." For example, instruction in dairying was given to one boy by a ranch foreman with the assistance of material from the state agricultural college at Davis; round-house work in the railroad yards was secured for a Mexican boy interested in engines; instruction in maid's work was secured in a home for a Mexican girl; and instruction in designing and trimming hats was offered to another girl by an expert milliner.

In San Diego the number of pupils who have received all of their four hours of instruction a week away from the school has not been large as those who may qualify to instruct part-time-school students on the job must fulfill certain state requirements, but a beginning has been made and the assistance of such a group is significant of a new trend in part-time education. Only in this way can the curriculum for the part-time high school students be made as broad and flexible as the pupils' needs require.

In summarizing, the fundamental requirements for successful education and vocational guidance in a part-time high school two factors are outstanding: First, those who act as counselors in the part-time high school must know the students—who they are, why they are part-time students, what they want to do, and what they do not want to do; and second, part-time high school counselors must know what the part-time high school and the community can do for others who are beginning their years of employment.

Part-time Act Amended

By JOHN E. CARPENTER

Chairman, Sub-committee on Legislation, State
Committee on Part-Time Education

For the third time in as many legislative sessions, the proposed amendments to the general continuation law has reached the governor's desk. At each of the two last sessions, the amending bill passed both houses of the legislature, but failed to receive the governor's approval. The second time, however, the governor was asked not to sign the bill, due to a technical error in its statement.

Because of the organization of the new school code, it was necessary, this time, to introduce two bills. Both of these were introduced in the Senate by Senator Baker of Salinas. In the Assembly the bills were sponsored by Assemblyman Jespersen of San Luis Obispo.

Senate Bill 332 provides for the setting up of classes, only if there are as many as fifty minors in the entire high school district who would be affected, instead of requiring their organization down to a minimum of twelve,

within 3 miles of the high school, as the present law requires. This bill also deletes the long list of specific requirements as to what shall be taught in such classes, and instead leaves the question of regulations for these classes in the hands of the State Board of Education. Senate Bill 385 provides for compulsory attendance upon continuation classes in much the same terms as specified under the present law, with the following changes:

(1) Under certain restrictions as to the meeting of standards set up by the State Board of Education and only upon approval of the local school authorities, instruction at the place of employment can be substituted for that at the school building.

(2) Minors not in full-time school are required to attend general continuation classes not less than three hours each school day during periods of unemployment. This should discourage unnecessary leaving of full-time classes, loafing, and careless and unnecessary dropping out of employment. This last provision will go into effect in July, 1930.

Each bill passed both houses of the legislature practically unanimously and was signed by the Governor. All supporters of part-time education owe a debt of appreciation to Senator Baker, Assemblyman Jespersen, and to many other friends in both houses who were responsible for the successful passage of these two measures.

Variety of Courses for Continuation Teachers

In addition to the list of courses in vocational education which are of special value to the continuation-school teachers a variety of courses in many fields are offered at the University of California during the 1929 summer sessions. The special courses in vocational education are as follows:

In Berkeley

- | | |
|---|---------------|
| S160. Vocational education: general course. | Dr. Ricciardi |
| S164. Vocational guidance. | Mr. Campion |
| 167c. Cooperative vocational education. | Dr. Ricciardi |
| 163c. Construction of vocational curricula. | Mr. Mallary |
| S162. Part-time education. | Dr. Palmer |

In Los Angeles

- | | |
|--|--------------------------------------|
| S160. Vocational education: general course. | Mr. Mann |
| 169. Problems of the coordinator. | Mr. Stier |
| S164. Vocational guidance. | Dr. Horridge |
| 362. Technique of vocational instruction. | Mr. Johnson, Mr. Waidelich |
| 363. Analysis and organization of related technical curricula. | Mrs. Donovan, Mr. Walton, Mr. Wright |
| 366. Part-time, cooperative, and trade extension education. | Mr. Stier |
| 367. Civic and employment relations. | Mr. Mann |

For commercial, homemaking, and trade teachers in continuation schools other courses for special teachers in this field will be found elsewhere in this publication.

In fields other than vocational education, many courses are offered this summer which will be of interest to continuation-school teachers. Among them are the following:

In Berkeley

- | | |
|-------------------------------|-------------------|
| Economics: | Mr. Johnston |
| S153. Industrial relations. | Professor Bossard |
| S180. The control of poverty. | Professor Bossard |
| S181. Care of dependents. | Professor Bossard |

Education:

187. School counseling. Dr. Alltucker
 337. Children's problems—diagnosis and adjustment. Miss Piekarski
 338. Case studies in children's problems. Miss Piekarski
 381. Problems of human adjustment. Dr. Stolz

Criminology:

- 113E. The treatment of delinquency and personality disorders. Dr. Smith
 115T. Child guidance procedures with case studies as related to delinquency. Dr. Smith

Psychology:

169. Mental adjustments in childhood. Assistant Professor Macfarlane
 193. Mental hygiene with reference to physical handicaps and behavior problems. Dr. Richmond
 193P. Emotional maladjustments: their cure and prevention. Dr. Richmond

In Los Angeles

Economics:

- S180. The control of poverty. Professor Queen
 S181. Care of dependents. Professor Queen

Education:

- S111. Growth and development of the child. Miss Bishop
 Full details of these courses, including a brief description, hours and units of credit will be found in the respective summer session catalogues.

Continuation Education Committee Publishes Bulletin

A complete report of the state committee on part-time education has appeared in a bulletin published through the courtesy of its chairman, Vierling Kersey, by the students of the Frank Wiggins Trade School in Los Angeles. The bulletin contains first the results of study of 1222 pupils from twelve part-time schools in the state. The study deals with the mentality, school grade completed, and educational age of the pupils. The investigation was made by Mary F. Mecredy, who concludes that:

"The part-time school must plan all programs from the point of view of the pupil's strongest assets and their principal interests—not from the viewpoint of their defects. It must evaluate their equipment, find them employment, and up-grade them on the job. It must provide social contact for them with their own group, under wholesome conditions and supervision. It must give them channels for self-expression through the medium of shop work, homemaking classes, glee clubs, art clubs, dramatics, sports, and other activities which will, in turn, inspire them to a wise use of leisure when they leave school. It must guard them from child labor exploitation by providing placement service. It must protect the mentally weak and emotionally unstable by training and placing them in employment, if possible, and by recommending them for custodial care, if they cannot be made socially independent. . . . In short, it should be the agency to which all these young people can turn for the aid which other minors are receiving in the full-time schools and for such additional help as the exigencies of their own situation demands."

Other sections of the bulletin were written by the state chairman as a result of the many sectional conferences. They are entitled:

California and present needs for a continuation-school law.

Interpretations and attitudes concerning the present continuation school situation in California.

Problems and suggestions.

General suggestions.

Suggestions to the State Board of Education.

Factors for evaluating the work of the school for employed minors.

Digest of all suggestions which were made for legislation.

Proposed legislative bill for enactment 1929 legislature.

It is gratifying that the continuation-school bill proposed by this committee, after nearly two years of work, has become a part of the state school law.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE
STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
 No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
 No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
 No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
 No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
 No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
 No. 11. Bulletin No. 9. The Work of Juniors in Retail Grocery Stores. July, 1922. (*Out of print.*)
 No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
 No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
 No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
 No. 16. Bulletin No. 23. Developments in Part-time Education in California. February, 1928. (*Out of print.*)

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
 No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
 No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
 No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

NEWS NOTES

- Vocational Education News Notes, v. III, Nos. 1-9, October, 1924-June, 1926 (No. 7 out of print); v. IV, Nos. 1-5, November, 1926-April, 1928; v. V, Nos. 1-3, November, 1928-May, 1929.

Orientation in the Junior College

By BESSIE M. ROBERTS

There was a time when an educated man knew all there was to be learned. Knowledge was so limited he could embrace it all. The visiting lecturer in the early Renaissance period could soon tell all the known facts of the ancient world to his eager listeners. But that was long ago. Inventions and discoveries have come so fast, printed material has increased so rapidly, that it is impossible to know everything about even one field of knowledge. We are overwhelmed by this tremendous mass of detail bordering each field, with its complex social, political, and economic implications. Society has not been able to keep pace with the ever-increasing complexity of the social order. It has had difficulty in adapting its institutions to meet the needs of this rapidly changing world.

The college is one of the institutions which has been slow to recognize its function in the light of life needs. Is it any wonder, then, that the freshman is bewildered by the multiplicity of courses and the demands of various activities which call him first one way and then another?

Development of Orientation Courses

The orientation course was organized to help students find themselves in relation to their college curriculum and the changing world about them. As long ago as 1909, President Lowell of Harvard University recognized the importance of helping freshmen make proper adjustments. In his inaugural address of October, 1909, he said, "The change from the life of school to that of college is too abrupt at the present day. Taken gradually, liberty is a powerful stimulant, but taken suddenly in large doses, it is liable to act as an intoxicant or an opiate. No doubt every boy ought to learn to paddle his own canoe, but we do not begin the process by tossing him into a canoe, and setting him adrift in deep water, with a caution that he would do well to look for the paddle."¹

The first orientation course to be established after President Lowell's address was at Reed College, Portland, Oregon.² By 1917, the year in which the United States declared war against Germany, eleven such classes were organized to care for the needs of freshmen. Many courses were organized in different colleges, and even in social groups, in order that citizens might understand the historical, economic, and social problems involved in the World War. The idea was thought to be good for a peacetime world, especially, since the signing of the peace treaty left the country with many new economic, social, and political problems to be solved. Then, too, the young people, in ever-increasing numbers, flocked to the colleges

where the growing emphasis on departmental specialization made it desirable to give students who were not devoting themselves exclusively to the social sciences, some survey of modern thought as related to man and his world.

Columbia University was the first to recognize the need of developing more intelligent participation in the activities of the civilized world and organized a course called "Introduction to Contemporary Civilization." It was first given in 1919-20 and was required of all freshmen.

In 1922, a committee of the American Association of University Professors found that several leading colleges, including Columbia, Dartmouth, and Brown, were offering orientation courses emphasizing the adjustment of the student to the college environment, training in thinking, the seriousness of college work, the nature of the world in relation to mankind, historical background of contemporary civilization, and intelligent interest in the main human problems of the present day. Today the movement is quite general among colleges and universities.

² Fitts, Charles T. Problems involved in the construction of orientation courses for college freshmen. Thesis, M.A. Education Department, University of California, Berkeley, December, 1927.

A. V. A., New Orleans, December 5-7



OLD FRENCH MARKET, NEW ORLEANS

¹ Editorial. Inaugural address of President of Harvard University. Science, N. S., v. 30, p. 503-4, Oct. 15, 1909.

Orientation Courses in Junior Colleges

The orientation movement in the older collegiate institutions has had its effect on the curriculum of the junior colleges. In 1907, the California legislature passed a law authorizing the establishment of junior college districts. Another act was passed in 1921 providing state aid for junior colleges. Under the stimulus of this law, many junior colleges have been organized in California. According to the latest available statistics there are now thirty-six such colleges.³ In other states the junior-college movement has also been growing rapidly.

John W. Harbeson, principal, Pasadena High School and Junior College, sent a questionnaire to all known public junior colleges in the United States and received replies from 39 of them.⁴ He hoped to ascertain what administrators consider an ideal course in orientation for the junior college and, also, what was being done to administer such a course. From a study of all available private and public junior college catalogues it was found that out of 40 junior colleges, 23 are now offering an orientation course or its equivalent. All of these colleges but one are in California.

Mr. Harbeson found that chief among the aims mentioned by these junior-college deans were educational guidance; improvement of study methods; vocational guidance; acquaintance of the student with his abilities, interests, and difficulties; adjustment to college life; and budgeting of student time.⁵ With the addition of vocational guidance, these aims correspond very closely with the objectives of the older collegiate institutions. The junior colleges are putting more emphasis on the individual, his personal characteristics, and his choice of a vocation as well as of an avocation.

The following table, arranged from Mr. Harbeson's study, will show what these 39 junior-college officials think should comprise the content of the orientation course:

<i>Content of orientation course—</i>	<i>No. of colleges reporting</i>
Adjustment to college environment and life	28
Improvement of technique of study	28
Self-knowledge and self-development, including an elaborate standardized testing program followed by group and individual counseling	28
Educational guidance	26
Training in use of library	25
Training in thinking	24
Vocational and avocational guidance (including aptitude tests and counseling)	24
Training in scientific method	23
Training in note taking	22
Training in silent rapid reading	22
A study of our social heritage and problems involved in modern human relations, looking forward to increased social efficiency	20

A glance at this table shows that although many of the junior-college deans have not established an orientation course they are quite agreed on many of the main objectives. Such is the origin of the orientation movement with its introduction into a relatively small number of public junior colleges.

³ From statistics compiled in the office of the University Examiner, University of California at Los Angeles, August, 1929.

⁴ Pasadena Junior College Bulletin. 1927-28, p. 12.

⁵ Department of Superintendence. Sixth Year Book, 1928, p. 256.

Problems Met by the Orientation Course

A few of the most important problems involved in helping the freshmen "find" themselves are analyzed more completely. One of the greatest needs of the freshmen is to learn how to study. It is surprising that, although studying is to be their chief responsibility for four years, they are never told how to do it. At one time, in a well-known college, the students of a class in education were asked to bring reports on what the other teachers in the academic departments said when asked how to study. The class was convulsed with laughter when the report was given that the mathematics professor, who was always in a hurry, said, "I haven't time." It is true that most teachers are so interested in their subject matter they forget all about methods of study and what is worse they are unmindful of the effect on the individual student. It will be recalled that 28 deans from 39 junior colleges believe that improvement in the technique of study should be one of the aims of the orientation class.

Dr. Ernest C. Moore, director of the University of California at Los Angeles, makes his whole freshman course one on how to study. He says in a reply to a questionnaire sent by Charles T. Fitts,⁶ "I think you already know my conviction that Milton was right when he said 'Let them first study some good work on education.' Inasmuch as studying is to be their chief business for some years to come, it seems to me that they ought to be well oriented in what studying is. I do not think that it is by any means as important to attempt to give them an outline of the world and of man's life upon it in a brief course as it is to attempt to tell them about themselves and what it is they can and will be expected to do. So my course is confined to an effort to obey the injunction of the oracle of Apollo."

Professor William F. Book,⁷ at the University of Indiana, gave reading tests to students comprising the freshman class and, from the results, concluded that the reading ability of college freshmen must be accurately determined and special remedial instruction provided in an orientation class. He states that improvement made in learning to read was 102 per cent in two "How-to-study classes." Of the freshmen students enrolled in these two sections, 87 per cent completed their total enrollment in the university in a satisfactory way to all instructors, while only about 50 per cent of the freshmen entering the university that year did this.⁸ It is hoped that more experiments will be conducted along this line and if the results verify such satisfactory conclusions as those mentioned above, that more colleges will adopt this method of increasing efficiency in the ability of their students to study.

Since the freshman's chief occupation is reading, he should know how to obtain the material to be read. Professor J. C. Green, who teaches a course called "Historical Introduction to Politics and Economics" at Princeton University,⁹ says students attending the university too

⁶ Fitts, Charles T. Problems involved in the construction of orientation courses for college freshmen. Thesis, University of California, Berkeley, 1927.

⁷ Book, William F. How well college students can read. School and Society, August 20, 1927.

⁸ Book, William F. Results obtained in a special "How-to-study" course given to college students. School and Society, Oct., 1927, p. 529.

⁹ American Association of University Professors. Bulletin No. 8, 1922, p. 366.

often have had no practice whatever in the use of books of reference, even of such elementary aids as dictionaries, encyclopedias, and atlases. As a result he makes library training one of the purposes of his course.

A still worse indictment is that of Charles M. Baker from the University of North Carolina library, when he says, "Our freshmen constitute a library problem because most of them have never been in a library before. Our graduate students are still worse, however, as many come from small colleges that have poor libraries. Each year we find some that do not know how to use the catalogue."¹⁰

Several of our California junior colleges include library training in their orientation course. Both Pasadena and Compton junior colleges are offering comprehensive instruction in the use of the library. A few colleges teach library science as a separate course. All but three of the 28 junior-college deans, replying to the Harbeson questionnaire, think that this subject should be included in the orientation course.

The colleges quite generally have given the student some kind of educational guidance, but they have been slow to recognize his need of a vocational objective. They have not analyzed the causes of failures in the light of methods of study and the proper choice of curricula. Indeed, the choice of a vocation is not thought to be compatible with the functions of a liberal-arts college, even though the graduates will soon seek some kind of employment.

There are many occupations of which most high-school seniors have never heard, and many more of which they have only a very meager knowledge of the requirements. One of the most important functions of the high school and college counselor is to see that each student is receiving the proper educational and vocational guidance. At Pasadena Junior College each student is impressed with the importance of choosing a vocational objective in the light of his personal characteristics. It maintains separate orientation courses for the diploma (or non-recommended)

¹⁰ English, A. J. *School and Society*, v. 24, p. 779.

students, and for the certificate (or recommended) group. Another admirable feature of the Pasadena orientation work is that it is organized as a separate department, not being attached to the psychology or social science department. It is under the supervision of the college counselor and a staff of teachers drawn from the latter department. This course deals with the adjustment of freshman to college problems; to human relationships, involving problems of good citizenship; and to vocational adjustment, including vocational guidance. "It is the aim of the Pasadena Junior College that no student shall leave its walls without, at least tentatively, having made some intelligent decision on a life work."¹¹

One of the primary aims of education is the worthy use of leisure. This is a problem of growing importance due to the general tendency to decrease the number of working hours and increase the high speed activities of this industrial age. The orientation course should, therefore, encourage students to make a study of their interests and aptitudes and develop an avocation as well as a vocation.

The orientation class will not be complete without a consideration of the relationship of the college student to present-day social, economic, and political problems. The development of the right ideals and attitudes toward the changing social institutions should be one of its chief functions.

From a survey of the history and origin of the orientation movement and its introduction into the junior college, with a brief analysis of some of its outstanding problems, it is apparent that the orientation class has its function in the school system of today, although it is still in its embryonic stage. Further experimentation will be necessary to develop its possibilities for usefulness.

¹¹ Book, W. F. *Intelligence of high school seniors*. 1922.

A term paper prepared under the direction of Professor Edwin A. Lee at the University of California in partial satisfaction of the requirements of a course in vocational guidance.

Training to Meet the Needs of Business*

By MILDRED LEIKVOLD

Positions in business are not standardized. Different types of occupations in the same office have *similar* requirements; the same type of occupations in diverse offices have *different* requirements. Especially is the diversity apparent in the occupation of stenographer-secretary. In training young people in high school for this position it is necessary for teachers to know the diversity of duties which this occupation entails. This study of the position of stenographer-secretary is separated into the two divisions of skills and knowledge, and habits and attitudes.

Skills and Knowledge

The average high-school student has the privilege of being trained to acquire skill in three main subjects: bookkeeping, typewriting, and shorthand. These three

subjects form the nucleus of education for business. It is a distinct advantage for stenographers, employed in an average office, to have a fundamental knowledge of bookkeeping principles, as well as of shorthand and typewriting. There are many positions open to stenographers that, when actually analyzed, are found to require a knowledge of record-keeping that cannot be intelligently accomplished without education in bookkeeping principles. This knowledge, of course, may be picked up by means of the trial-and-error method, but a greater length of time is required before reaching efficiency.

Bookkeeping.—Bookkeeping includes much more than a double-entry or a single-entry system. In the actual application of bookkeeping in office work knowledge of the principles, alone, or facility in making entries for transactions, alone, is not sufficient information to insure success. Neatness, orderliness, thoroughness (ability to follow through the statements, letters on past-due accounts, etc.), capacity for clear, sound thinking, power of con-

* A term paper prepared under the direction of Dr. Ira W. Kibby at the Summer Session of the University of California, in partial satisfaction of the requirements of a course in current problems in commercial education.

centration, and good memory are all essential qualities. Especially is a good memory necessary. It is surprising how few employers consider books as a source of information. It is the bookkeeper who must know the answers at any time regarding prices, discounts, balance sheets, inventories, payrolls, and the names of various business houses with whom the firm deals. Frequently the employer is impatient if time is taken to look up the information he has requested.

Bookkeeping systems, as such, are essentially useless. Any two offices are likely to have entirely different systems. However, a thorough knowledge of bookkeeping principles enables one to familiarize himself quickly with the various devices and methods used in any office to record the information needed.

Typewriting.—The stenographer-secretary must, of course, have acquired skill in typing, but typewriting speed, in itself, is not necessary. Most large offices have enough employees to do their work satisfactorily; therefore, each individual has sufficient time in which to do his day's work. Speed as a time-saving element in an office is not, generally speaking, absolutely essential. The emphasis should be placed on other abilities. The ability to type a letter accurately the first time and to turn out work that is artistic in arrangement and neat in appearance is as important as speed. The ability to write a letter which is properly paragraphed, perfect in spelling, punctuation, and sentence construction, and stated clearly and concisely is more highly prized in an office than speed. Speed is an advantage only when accompanied by these other skills.

The typist needs the ability to organize and construct a proper letter. She may be asked to write a letter of condolence to some bereaved family, to send a letter of thanks and appreciation to a total stranger for some trifling service that must be acknowledged, or to write a recommendation for a janitor.

Shorthand.—Again, as in typewriting, speed should not be impressed upon the student as of prime importance in shorthand. The average business man dictates letters slowly, with frequent pauses, enabling the stenographer to follow him easily. The stress should be placed in drilling the stenographer to read her notes at the typewriter. Here is where so much time is used. There is no advantage in her being able to type at a rapid rate if she is unable to read the material she must type faster than fifteen words a minute.

Employers in many offices do not dictate letters word for word. Pencil notations in the margin of letters such as, "Tell them we are taking this up with our attorney," or "U. P. Frt. 8/3/29,—4 6 3s orchid" may be all the stenographer receives in the manner of dictation. In some offices it is one of the stenographer's duties to open the mail, read it, and then to report to the employer who, with a few instructions, expects her to make the proper reply. Speed, accompanying the knowledge necessary to carry out such instructions, is a decided advantage.

Shorthand skill must be coupled with ability to correct mistakes made in dictation and to assist the dictator with the proper word or phrase to express the meaning he wishes to convey. Vocabulary, diction, alertness, and tact are essential, as are also the ability of the stenographer to take dictation in a manner that does nothing to dis-

tract the dictator's attention. Eyes kept steadily on the notebook, no sign of impatience during the pauses when the dictator is searching for the right word or phrase and control of an impulse to suggest a word that might be of use before being asked for it are habits that need to be cultivated by every stenographer while taking notes.

The degree of skill to be attained in shorthand, typewriting, and bookkeeping should be dependent upon the speed that is compatible with best quality—accuracy—and with a fundamental knowledge of the basic principles of business needs. The latter should be attained even though a sacrifice of time must be made in the classroom period, which is usually devoted to gaining speed in the particular skill-subject being taught.

Telephoning.—There are other important duties in an office aside from taking dictation, keeping records, and typewriting reports—for instance, answering telephone calls. Continuous proper use of the telephone is rarely found in a busy office, yet its importance cannot be overrated. Friends are made of customers over the telephone when taking their orders, making appointments, or giving information. The clarity of answers, the timbre of the voice, the courtesy of the replies, the willingness to go to a little extra trouble to get the information desired or locate the person asked for, all leave a favorable or unfavorable impression upon the client.

Another phase of the ability to use a telephone is to be able to leave messages taken over the telephone in a simple, legible, and accurate form, in a place where they will be sure to be found by the person for whom the message was meant.

Personal contacts.—Personal contacts with clients must impress them anew with the quality of service, courtesy, and high standards for which the company stands. This requires a highly developed social understanding on the part of the employee. Here again, friends are made or lost. A client comes to the office for specific information or assistance. His reception as a person of importance, the undivided and courteous attention he receives, will do more to win his patronage than a large amount of money spent on advertising. The employee who is interested in people, who is tactful, courteous, patient, and who is equipped with a thorough knowledge of the business so that his remarks carry weight, will be prepared to deal successfully with the many persons whose friendship is essential to the success of the employer's business.

Social understanding is needed in order to work in harmony with other employees. Poise maintained by a stenographer throughout the varied situations that frequently arise in any office makes her services more valuable to an employer. Cooperation in any form adds its bit to the efficiency of an organization. This applies to a stenographer's ability to be on pleasant terms, not only with the other employees, but also with salesmen, buyers, and special business associates of the employer. Ability to realize the amount of attention necessary to give to these people is of great importance.

Habits and Attitudes

The development of habits and attitudes should not be left entirely to the commercial teacher. This demands the cooperation of all teachers throughout the entire school system, from the student's entry into school life.

James H. Greene states, in his book "Organized Training in Business," that, "Business training is not a matter of textbooks, blackboards, and recitations; these are all right in their place and commercial education has need of them, but they do not spell the sum total of training necessary." The importance of traits, as they apply to specific duties in an office, should be stressed by the most ingenious devices, examples, and illustrations at the command of the teacher, and should be done in a manner that is business-like and free from moralizing. There are still other attitudes which are valuable in the work of an office. The stenographer's genuine interest in assisting the employer in minor details is appreciated. Waste of paper, supplies, carelessness in leaving electric lights burning in rooms not being used, needless long-distance telephone calls, unnecessary telegrams should all be watched closely.

Another attitude appreciated in an office is unconcern as to the time of day. "Clock-watchers" are not found indispensable to any organization. Dropping the work in hand the moment the hour for lunch or for closing time is struck does not signify the kind of interest in the work which an employer is desirous of having.

Power of observation and its value in an office should be emphasized. A stenographer's fund of information concerning the office may be entirely dependent upon her ability to observe. Many an employer expects his stenographer to know all details of business transactions, yet he seldom takes time to tell her about them. She must gather these facts herself. Then, too, the stenographer's appreciation of the value of all incidental information acquired is indicative of her success. Information as to general rates by freight, express, post, air-mail, and telegraph to various points is of assistance and increases her value to an office.

Teaching Methods

The methods of presenting these varied bits of "inside information," of skills, of fundamental principles, and of social understanding must be worked out by the teacher. Her ingenuity in emphasizing these traits and attitudes in a new background may assist in making an impression of their value. The association of the many habits and attitudes with every-day lessons and drills will do much to acquaint the student with the needs of office procedure. Perhaps a new course of training may be introduced to emphasize these values; if not, their inclusion in the regular courses should be arranged.

The training of stenographers in high school should equip them with a thorough knowledge of the fundamental principles of bookkeeping, shorthand, and typewriting. It is not necessary to lower the present speed goals, but it is important to add to the curriculum a broader vision through some form of instruction. The student should acquire skill that will enable her to be an asset, rather than a liability, to her first employer. Large corporations, according to Paul G. Hoffman, president of the Studebaker Company, feel that, "The outstanding job of industry today is to build men and women. . . . It is now regarded as an established fact that training is an essential part of corporation managers' duties." For that reason, the majority of the leading corporations have established schools to increase the value of their employees to the corporation.

Business needs a great deal from the stenographer in the way of ideals, abilities, character traits, and knowledge. High schools should enable their students to enter employment with a broad understanding of the demands to be made upon them, not only in these three generally recognized skills, but also in the other habits and attitudes which are necessary for success.

Commercial News Items

The commercial teachers of the North Coast Section of the California Teachers' Association held their annual meeting at Eureka during the week of September 23.

Fred J. Pribble, formerly of the Pribble School of Business, Sacramento, has been appointed director of business education for the Sacramento city schools. Mr. Pribble will devote a large part of his time to the organizing of cooperative training in the business field.

The Sacramento Valley Section of the Commercial Teachers' Association of California met on October 17 in Sacramento.

Averill D. Trotter of Amity, Oregon, has been appointed head of the commercial department, Concord High School.

Merritt High School in Oakland is being reorganized and will become, largely, a school to train individuals for the business field. A placement bureau will be maintained and the work will be carefully coordinated with the business activities of Oakland. One of the developments will be an intensive course of training in bookkeeping, stenography, salesmanship, and merchandising for high-school graduates or other qualified individuals.

The summer session courses for commercial teachers at the University of California, Berkeley and Los Angeles, University of Southern California, San Jose State Teachers College, and Armstrong's College of Business Administration were well attended by the commercial teachers of the state. This shows that the commercial teachers are anxious for upgrading courses in business education and will attend these courses when the universities offer them.

The demonstration class in typewriting, under the direction of Miss Bertha Whillock, at the University of California, Berkeley, was well attended and the teachers were enthusiastic in regard to this manner of demonstrating the latest methods in the teaching of typewriting. It is hoped that a similar course can be offered at the University of California, Los Angeles, next summer.

Alfred Sorensen, head of the commercial department, University High School, Oakland, and in charge of the commercial teacher-training work at the University of California, Berkeley, was seriously injured by the fall of the airplane which he was piloting to Santa Rosa to take part in the dedication of the new Santa Rosa Airport. Mr. Sorensen is at Letterman Hospital, San Francisco, and is now recovering rapidly from his injuries.

The Homemaking Major

By GEORGE I. LINN
Principal, Manteca High School*

The functions of the homemaking major provide a means for girls of high-school age to take a second major toward high-school graduation, thus providing general and specialized training in homemaking. A major in homemaking should be marked by organic unity in the essentials of this field of knowledge and should provide at least 30 credits (3 units) as the minimum major requirement. The purpose of the major in homemaking is to prepare girls to assume their places in family life first as daughters and later as homemakers. The scope of the major should be determined by the needs of girls selecting homemaking as a major—in homemaking as in any other major, the emphasis primarily should be determined by the needs of the group.

The need for the homemaking major is apparent when its purpose and scope are understood. There are girls in practically every school whose training is not in accordance with their needs and, as a result, they drop out before finishing any course or they continue taking studies which have no ultimate value to them. Where a major in homemaking is provided they receive training that will be valuable throughout a lifetime.

The homemaking major should include the study of food—its preparation and service; clothing or home sewing; related art; child care and training; home management; the care and furnishings of the home; family budget making; and a study of the social and economic problems of the home. The quality of the instruction will depend upon the training of the teachers. Specially trained teachers who have a broad vision of home training as well as the technical knowledge of the several subjects listed in the homemaking course should be secured, if possible. It should be expected that all girls in high school should take at least one homemaking course and that a number should complete majors in homemaking.

The results to be obtained will depend to a definite extent upon the personality, attitudes, training and experience of the teacher. Her source of information should be such that it can be adjusted to the interests and abilities of the girls in her classes. She should make contacts with the home and community life of the girls in her classes so as to be able to know circumstances and to meet them sympathetically. Actual situations should be used as the basis for much of the training. Home practice should be encouraged and it is desirable that the homemaking teachers should make home visitations although the latter is not always practicable.

The attitude of the teacher should be to engender appreciation, understanding, and enjoyment of homemaking. Family relationships should be taught so that the proper status of parents and children, children and parents, and the part the family should play in community life be understood.

* Paper presented before the section meeting on homemaking majors, at the last High School Principals' Convention.

The teaching should be around problems, e.g., child care and training; appreciation of cost of foods and clothing; consideration of the mother's share of the income; the relation of wants to the family income; clothing selection, use, and care; house planning; family budget; and a host of other home problems. The girl should recognize family life as a cooperative effort and she should get an idea of the kind of home she wants for her own.

The course should include an understanding of children, the foods they should have and how to plan and prepare their meals; the need for maintaining sanitary conditions in the home and how to do it; and how to entertain children, tell stories to them, teach them games, provide parties, secure playthings for them, and select their reading material from books and magazines.

The girl should receive health training—the basic principles of sanitation, dietetics, and nutrition, and specific information on diet, health habits and child care. There should be a conscious, cooperative effort between the homemaking teacher and the girl's physical director to insure training for healthful living. In fact, there should be a conscious effort on the part of teachers of related subjects to cooperate with the homemaking teacher to make it possible for the girl majoring in homemaking to receive correlated training in all the subjects she takes. English should contribute something in the selection of reading materials; mathematics should consider budgets; history should give some consideration to the part the home plays as a social institution; science should be taught from the standpoint, to an extent at least, of home science.

The homemaking major, then, should be broad and well rounded so that the girl selecting homemaking as a major may get the proper ideals. The obvious common essentials should be given and certain minimum requirements should be met in the course. The study of homemaking should contribute to better and more interesting home life, good citizenship, and community life and service.

The homemaking course of study should be focused on the essentials of the field of homemaking and should be developed from the standpoint of the problems and situations that exist in the home. To accomplish these ends, the following courses are suggested as the minimum requirements of a homemaking major:

A. Minimum course:

1. One-half year of food study, preparation, and service.
2. One-half year of clothing construction and selection.
3. One-half year of general home problems.
4. One and one-half years of general problems or intensive work in clothing, foods, nursing, home art, home science, or such other subjects of a similar nature as might be desired.

B. Optional course:

1. One year of food study, preparation, and service.
2. One year of clothing or home sewing and related art.
3. One year of carefully selected home problems including child care and training; the management of the home, its care and furnishing; the budget, and the social and economic problems of the home.

The proper equipment is essential to the success of homemaking instruction. Ideally, a cottage or apartment

should be provided, so that a home setting exists. The size and cost of the laboratory will depend to a definite extent upon the local situation but the physical plant and interior equipment should be adequate for about 18 girls in a class. The arrangements should be such as to provide the best methods of ventilating, lighting, and heating. The equipment should correspond to that commonly found in the good homes of the community. In other words, the physical plant and equipment for home-making classes should provide an acceptable home environment. The meals should be served as in the average family, and emphasis should be placed on family relationships.

The homemaking major is justified if it is organized to prepare girls to assume their places in family life, first as daughters and later as homemakers. It is entirely possible, too, that a major in homemaking might be selected by those who plan for some occupation open to women trained in home economics, but the main value would come to those who would become homemakers.

Short Units from the Teacher-Training Classes

THE LEARNING of a vocation is not new; it has been the life experience of all people in all times since the exodus from the Garden of Eden.

* * * * *

WITHOUT vocational schooling kings have learned to reign and serfs to serve. Since the first vocations, hunting and agriculture, all vocational learning has been effective—if not efficient.

* * * * *

REVOLUTIONS for kings and floggings for serfs are costly, but nevertheless effective, vocational lessons. We deplore experiential and pick-up methods of learning, not because they are ineffective—they are very effective—but because they are often wasteful.

* * * * *

ALL a formal vocational-school set-up or plan can do is to make learning a little easier, a little less costly to the individual and to society.

* * * * *

VOCATIONAL teaching is an art, vocational pedagogy a service, and the vocational school an institution. They possess the lowly and lofty duty of ministering to a fundamental human need—the need to learn how to earn a living.

* * * * *

THE ART of teaching is the art of helping pupils to learn. The science of pedagogy is the science of learning—an aid for teachers in understanding how learners learn. A school is an institution within which learning is efficiently organized and carried on.

* * * * *

TEACHING is directing learning.

* * * * *

IN THEORY the teacher is the servant of the learner; he does things for him which make learning easier. Better still, he makes it possible for the learner to do for himself the things which result in learning.

BUT we must not forget that learning is such a natural fundamental thing that all learners would continue to learn if all teachers were suddenly called to Abraham's Bosom.

* * * * *

THE ONLY way to learn to teach is to learn how to get others to learn. It sounds simple—just learn how to save the time and energy of learners.

* * * * *

NATURAL or pick-up learning possesses the advantage of supplying only what is necessary to learn.

* * * * *

OFTEN the "school of hard knocks" carries out the personal equation with a vengeance.

* * * * *

BETWEEN the extremes of the "school of hard knocks" and the "school of soft pats" should lie a middle course—a set-up where those who want to learn can be directed and aided in finding out what it is necessary for them to learn and assisted in learning it.

* * * * *

IT IS much more difficult to find out what it is necessary to learn than to learn it. Yet, I am often mystified by the graceful ease with which most vocational teachers assume the responsibility of dictating the course of learning of their charges. The mildest mannered and humblest of individuals will produce a course of study as mystically as a magician plucks a rabbit out of a black hat.

* * * * *

AT THAT they have nothing on the teacher-trainers.

* * * * *

PERHAPS we work with subject matter because it is so much easier to handle than learning or learners. Subject matter is docile, wieldy, dependable. It is much easier to make a showing with subject matter than with learners.

* * * * *

THERE IS a great deal of personal satisfaction in lecturing to a class, demonstrating how to do a thing, telling students what to do. The teacher, at least, has the stage—while in learning the spotlight is turned the other way—on the learners. If teachers had to turn from being expositors of truth to being directors of learning one of the profession's important compensations would be lost—or won.

* * * * *

BUNK in education is subject matter which has gotten on too intimate terms with the teacher.—B. E. MALLARY.

Continuation-School Leaders Win Promotion

Many leaders in part-time or continuation education in California have been promoted in the last four or five years to other positions of greater responsibility in the educational field. The most striking instance is the appointment of Vierling Kersey, who was the first director of continuation education in Los Angeles, to the state superintendency. Other promotions are listed below:

Donald H. Biery, director of continuation education, Vallejo, and later coordinator, Berkeley Continuation High School, to supervisor of vocational guidance and placement, Oakland.

- J. Carl Bowman, from the San Francisco Continuation High School, to vice principal of Horace Mann Junior High School, San Francisco.
- Bertram B. Bronson, from San Francisco Continuation School to vocational counselor Polytechnic High School.
- Burton A. Burdick, from San Francisco Continuation High School to principal of Daniel Webster Junior High School.
- Howard A. Campion, from director of continuation education, Stockton, to principal of Frank Wiggins Trade School, Los Angeles.
- H. W. Dahleen, from San Francisco Continuation High School, to vice principal and dean of boys, High School of Commerce, San Francisco.
- Morris E. Hurley, from principal of Merritt Continuation High School, to principal of Prescott Junior High School, Oakland.
- Elizabeth K. Livermore, from coordinator, Sacramento Continuation High School, to attendance supervisor, San Francisco.
- H. N. McClellan, coordinator, Berkeley Continuation High School, to principal of Berkeley Continuation High School.
- John C. McGlade, from vice principal of the San Francisco Continuation High School to deputy superintendent of schools, San Francisco.
- Dr. Willard W. Patty, from director of vocational and continuation education, Berkeley, to professor of secondary education, Indiana University.
- Alma Poole, from coordinator Stockton Continuation High School, to supervisor of attendance, Stockton.
- James A. Power, from director of continuation education, Pittsburg, to dean of boys, Chico High School.
- Dr. C. E. Purviance, from San Francisco Continuation School to Department of Research and Service, San Francisco public schools.
- Robert E. Reed, from director of continuation education, South San Francisco to principal Anderson Valley High School, Boonville.
- Alfred Sorensen, from coordinator, Berkeley Continuation High School, to supervisor of the teaching of commercial subjects, University High School.
- Granville Thomas, from coordinator Berkeley Continuation High School, to superintendent of recreation, Playgrounds Department of Berkeley, and director of physical education, Berkeley Public Schools.
- James A. Woods, from Sacramento Continuation High School, to coordinator, Santa Barbara Vocational Department.

Other Changes

The following changes have been made in the teaching staffs of California continuation schools this year:

Harold J. Slater, formerly of the high school faculty at Roseville, where his duties included supervision of apprenticeship courses, has been appointed teacher of related subjects at Sacramento Continuation High School. Mr. Slater takes the position held during the past two years by Fred W. Jaehnig who has returned to his former position, director of continuation education in Petaluma.

Douglass H. Saunders, who was last year a graduate student at the University of California, is this year on the staff of the Berkeley Continuation High School. L. L. Standley, supervisor of visual instruction in the Berkeley School Department, is this year in the Continuation High School for half of each day as instructor in mathematics.

Preston B. Maughan, formerly principal of the high school at Wellsville, Utah, is the newly appointed director of continuation education in Pittsburg, due to the resignation of James A. Power, who has gone to Chico.

R. R. Stuart, formerly principal of Technical Evening High School, Oakland, has been appointed principal of Merritt Continuation High School, Oakland.

The newly elected director of vocational and continuation education in San Diego is Eliot F. Landon, formerly district supervisor in the Bureau of Civilian Vocational Education, of the State Department of Education. Mr. Landon will have general supervision of adult and continuation education.

Mrs. Bertha E. Earle, for eight years a teacher of English at Sacramento Continuation High School, resigned and retired from the teaching profession last June.

Gerald A. Castleman, formerly of Berkeley, has been elected to teach shop classes at Sacramento Continuation High School. Ralph R. Kandall, who held this position during the past six years has been transferred to the vocational department of the Sacramento High School.

Mrs. Marion G. Overman is director and Thomas M. Gerhart is coordinator in the Inglewood Continuation School.

Theresa Allecock, formerly secretary to the late Walter B. Crane, is now an instructor in homemaking and commercial education in the Long Beach Continuation High School.

Marie Adler is the newly elected instructor in comp-tometry in the Berkeley Continuation High School.

New instructors added to the staff of the Merritt Continuation High School, Oakland, this year are: Helen J. Smith, Olive Dutlein, Caleb H. Lindquist, and Kathleen Lorentzen, all commercial teachers; and Mrs. Nellie Casey and Verna House, home-economics teachers.

Gladys Merritt is the new instructor in home economics in the Santa Rosa Continuation School, replacing Helen Stanger who was married during the summer.

Paul J. Thiele of Fresno is giving half-time this year to the E. R. Snyder Continuation School.

Fred E. Danner is the coordinator for continuation education in Red Bluff.

Aubrey G. Smith and Evelyn Stephenson are new instructors in English for foreigners in the San Francisco Continuation High School; Edwin E. Nicolls from the attendance department is this year teaching English in the regular classes of this school.

Rose B. Tavernatti is teaching commercial work in the Watsonville Continuation School, taking the place of Opal E. Marshall who resigned.

Two instructors have been added to the staff of the San Jose Continuation High School: Edward A. Fingado for shop work, and Mary F. MacTighe for general continuation subjects.

George Engs, the first director of continuation education in Pittsburg, and for the last three years shop instructor in the Merritt Continuation School of Oakland, has transferred to Elmhurst Junior High School. With the change of organization in Merritt High School to a school for commercial and home-economics training, a number of other transfers were made, as follows: C. A. Carney to Central Trade School; Flora Damsell to Lockwood Junior High School; C. C. Dinwoodie to Herbert Hoover Junior High School; Mignon E. Harmon to teaching executive at Lockwood Junior High School; A. S. Krause to Technical High School; and Helen Brown Stephenson to Fremont High School.

The Telephone Operator*

By MARY REZOS

The telephone operator in the central office is the unit through which a call from one telephone to another is completed. Her importance may be imagined when we consider that, in 1926, there were an average of 52,354,834 telephone conversations a day. As there are 6,003 central offices in the United States any one of the 6,003 cities may be considered as a potential labor market of operators. Of course, the principal centers of employment are the larger cities. The operator's contribution to public welfare can hardly be over-estimated, since upon her depends the efficiency of 12,816,252 telephones.¹

Number Employed

Telephone operating is primarily a woman's occupation. In 1920, there were 190,160 women operators in the United States, and only 11,070 men operators.² The men were employed in posts where it would be impracticable to place women because of isolation and the need of doing heavy mechanical labor (inspecting poles and lines) in addition to completing calls on the switchboard. In 1910 there were 97,000 women employed, so the occupation has more than doubled its employees in those ten years.² By 1927, there were 299,000 operators.¹ In California according to the 1920 census, there were more than eight thousand telephone operators, most of whom were native born.

Total number employed	8,238
Native white	4,816
Foreign parents	2,916
Foreign born	484

Qualifications and Training Needed

Any girl of average intelligence and average health can be a successful operator. In all larger cities, graduation from grammar school is required, and one or two years of high school training is recommended.

The American Telephone and Telegraph Company, having a monopoly of the telephone service of the country, conducts its own training of operators. The average length of the course is two weeks, as in San Francisco. The city having the longest training period is New York, the length being six weeks due to the high efficiency required by the New York Telephone Company, made necessary by the speed required to handle the number of calls. The girls are paid during the training period. Training is given only at the training schools established in connection with each large central office.

Aside from a natural quickness, no additional skill except that learned from telephone practice is necessary. In fact, the best operators are those who have had no other occupational experience.

Personal Requirements

The entrance age is usually determined by the local state law. In California we find 192 girls under 17 years of age working as operators. The ability to speak English

* A term paper prepared under the direction of Emily G. Palmer at the University of California in partial satisfaction of the requirements of a course in vocational education of women.

¹ American Telephone and Telegraph Statistics, 1926.
² Census for 1920—Occupations.

is required. In some cities, as in New York and Chicago, prospective operators must pass a rather rigid physical examination. Any girl showing a disease of the heart, lungs, or other major organs, or being over 10 per cent underweight, or more than 15 per cent overweight is denied application for work. This is not because the work is especially hazardous, but because these companies have very liberal payments to be made when the operators are ill. However, in California there is no such requirement and no physical examination is made. The only qualifications are freedom from speech defect, and good sight and hearing. The only other requirement, that a girl be 5 feet 4 inches tall, in order to reach the ends of the board, is also often dispensed with. Also, in California girls who are lame or crippled are sometimes given a chance at operating. Marriage and children are no bar to telephone operating. A large percentage of the workers are married women with children.

Usual Length of Service

In California, operators work eight hours a day. Due to state regulation, this is the maximum working day. In certain other states, they may work overtime for which they receive additional pay. During the day, each operator has a "relief" of fifteen minutes for every two hours of continuous work. The average length of service is three years. The bulk of operators falls between the ages of 18 and 44—about 90 per cent of the total number employed. In California, according to the 1920 census there were about 200 operators between the ages of 45 and 65. It is interesting to note, also, that there were 6,934 operators between the ages of 20 and 24, and 2,745 operators between the ages of 25 and 44. So, operating can be considered as work for the middle-aged, as well as the young woman.

Service is usually interrupted, but at the wish of the worker and not of the company. Women leave to marry and return to work; they leave to travel and secure work in some other city, etc. The company is in a position to supply uninterrupted service should the worker desire it.

Remuneration

The salary in San Francisco for the two weeks training period is \$13.50 a week; for the second two weeks it is \$14.50; and for the next two, it is \$15.50; then it is increased to \$16.00 where it remains for six months. An increase of from \$1.00 to \$2.00 is usually given at the end of the six months' period. At the end of a year, a girl is usually promoted either to supervisor, or to another department for which she specifies a desire.

All employees in the telephone company, after working six months, have the right to purchase American Telephone and Telegraph Company stock at \$130 a share, but must take 38 months to pay for it. Since this stock sells for about \$290 in the open market the advantages are obvious. Sick benefits are also paid. In the Pacific Telephone and Telegraph Company, every employee, after two years of work with the company, receives, in case of illness, full pay for ten weeks, if she should be ill that long. Some companies have excellent medical departments where full care is given to all employees without charge. A two-weeks' vacation with full pay is given to all em-

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A. V. A. CONVENTION IN NEW ORLEANS

The next annual convention of the American Vocational Association will be held this year in the far south—New Orleans has extended the invitation. The convention headquarters will be at the Hotel Roosevelt. Join the A.V.A. through the C.V.A., and attend the convention!

On the cover page is a picture of the famous old French Market Place. This is only one of the interesting spots in the still charming French Quarter.

HOOVER SPONSORS VOCATIONAL GUIDANCE

Professor Edwin A. Lee has accepted appointment on the committee on vocational guidance and child labor—one of the sub-committees of President Hoover's planning committee for the White House Conference on Child Health and Protection. Secretary Wilbur is chairman of the planning committee, and has asked his sub-committees to make recommendations after a year's study of their special problem.

Anne S. Davis, director of vocational guidance in the Chicago public schools is the chairman of the committee on Vocational Guidance and Child Labor, to which Dr. Lee has been appointed.

PROFESSOR SKIDMORE BECOMES JUNIOR COLLEGE DEAN

Henry M. Skidmore, for five years supervisor of the training of teachers of agriculture at the University of California, has been appointed dean of instruction and acting dean of men in Sacramento Junior College.

Mr. Skidmore, in severing his connection with the University of California, leaves a field of work with which he has been connected for a number of years. For two and a half years he was state supervisor of agriculture in Washington and during one year he also had the added work of training agricultural teachers. For four years he was federal agent in the Agriculture Education Service of the Federal Board for Vocational Education for the Pacific Division comprising eleven states, and left this work to take up the training of teachers of agriculture at the University of California.

Mr. Skidmore is a graduate of Washington State College from which institution he also has a master's degree in education, and he has done further graduate work at the University of California. As dean of instruction at the Sacramento Junior College he will give orientation lectures to the incoming freshmen and have the responsibility for adapting and coordinating the various curricula in this rapidly growing institution.

DR. BERRY RETURNS TO CALIFORNIA

Dr. Ralph Berry, who was a member of the staff of the Research and Service Center, Division of Vocational Education, University of California, during the spring of 1921 and the full year of 1921-22, while on leave from the University of Wyoming, has returned to California accepting a position in Chaffey Junior College. Dr. Berry has been professor of commerce at the University of Wyoming and will hold a similar position in the junior college at Ontario. Dr. Berry's undergraduate and graduate work was done at the University of California. He has contributed many studies to the field of continuation education, among them the following bulletins, published by the Division of Vocational Education. An Analysis of Clerical Positions for Juniors in Railway Transportation; The Work of Juniors in the Telegraph Service; The Work of Juniors in Retail Grocery Stores; and The Administration of the Part-time School in the Small Community.

New Credential in Continuation Education

By recent action of the State Board of Education a new credential in continuation education has been authorized and the following credential will become effective in January:

An applicant for a credential in Continuation Education must present:

- I. A certificate from a physician licensed to practice medicine and surgery that he is physically and mentally fit to engage in teaching service.
- II. A recommendation from the department of education of a college or university approved by the State Board of Education with verification of:
 - A. One year of wage-earning employment other than teaching; or satisfactory supervised employment arranged by the teacher-training institution.
 - B. One year of successful teaching experience or social work.
 - C. The completion of a four-year college course, with a bachelor's degree, or the equivalent.
 - D. An undergraduate major in the field of social science, industrial arts, science, agriculture, home economics, or commerce.
 - E. A minimum of 12 semester hours of professional work in education, including:
 - Required courses—6 semester hours—
 - (1) Continuation education.
 - (2) Vocational education.
 - (3) Problems of the coordinator.
 - Electives—6 semester hours—
 - (1) Field work in continuation education.
 - (2) Vocational guidance.
 - (3) Problems of human adjustment or social-case work.
 - (4) Legal restrictions affecting the employment of minors.
 - (5) Construction of vocational curricula.
 - (6) Cooperative education.
 - (7) Extra-curricular activities for pupils of high-school age.
 - (8) Administration and supervision of vocational education.
 - (9) Vocational education for adults.

This new credential does not, of course, prevent the holder of a General Secondary Credential from teaching in a continuation school.

TRADE TEACHERS PLACED

Six collegiate institutions are training manual-arts and vocational-arts teachers. From these institutions many graduates are doing their first year of teaching. The list from three of these institutions is given below. In a later issue the list from Berkeley, Los Angeles Teachers College, and Santa Barbara Teachers College will be given.

Special limited credential graduates and degree graduates from the industrial arts department at the State Teachers College, San Jose, have been placed as follows:

- Laverne Brown, general shop instructor, Danville.
 Leonard Carroll, shop instructor, Los Gatos High School.
 Chris Crawford, printing in the Junior High School, San Diego.
 Fred Faltersack, farm mechanics, Gilroy.
 Donald Graham, physical education and manual training, Fernley, Nevada.
 Albert Kay, general shop, Los Gatos High School.
 Donald Kirtland, shop instructor at Eureka Junior High School.
 Herbert Knieriem, general shop instructor, Visalia elementary schools.

Ward Lusk, instructor of mechanical drawing and related English and mathematics, Santa Cruz High School.
 Milton Roscoe, general shop, Berkeley city schools.
 Leslie Russell, Bakersfield, farm mechanics and physical education.

George Spearman, assistant instructor automechanics, Industrial Arts Department, San Jose State College.

Clyde Sutfin, woodwork and mechanical drawing instructor, Los Banos High School.

Roy Voss, automechanics and machine shop, San Luis Obispo Junior High School.

Los Angeles Graduates

In the southern part of the state a large number of recent graduates were placed by the Division of Vocational Education, University of California at Los Angeles, as follows:

Anaheim High School, A. P. LeTourneau, machine shop; Bakersfield High School, H. J. Drennan, automechanics; California Junior Republic, Chino, R. J. Buckle, related subjects; Fullerton High School, Andrew Good, printing.

Long Beach: Washington High School, W. G. Threader, aeronautics; Jefferson Junior High School, W. E. Strandberg, electricity; Polytechnic High School, N. W. McGinnis, electricity, and Floyd Nelson, automechanics.

Los Angeles: Coronel School, W. K. Bishop, printing; Foshay Junior High School, J. W. Finley, printing; Fremont High School, Clara Lehman, power sewing; Jacob Riis High School, Charles Peterson, reed furniture making; David Starr Jordan High School, Lena M. Sullivan, personal hygiene; Lincoln High School, R. R. Pearson, electricity, and R. M. Rogers, machine shop; Frank Wiggins Trade School, Nore C. F. Carlson, commercial cooking; Ernest England, carpentry; H. A. Ill, tile setting; H. L. Myers, automechanics, and J. H. Yeaman, auto reconstruction.

Los Angeles special-class teachers: Polytechnic High School—Jeanette J. Benom, millinery, Lura C. Davis, china painting, etc., and Elsie M. Hackney, dressmaking.

In Los Angeles evening high schools the following placements were made: Lincoln, Alice E. Morgan, personal hygiene; Manual Arts, S. H. Fish, plan reading, and James McConahey, Jr., electricity; Metropolitan, Flora B. Butler, dressmaking; Roosevelt, Elsie Gebert, millinery, and F. P. Klein, paper hanging and painting; Sentous, Iva M. Chellis, personal hygiene; Frank Wiggins Trade School, Gertrude J. Abbott, personal hygiene; C. W. Baker, theory of automechanics; L. R. Bryant, sheet-metal work; Evangeline M. Huntley, personal hygiene; Christine E. Krug, dressmaking-design; Rosalie Nogue, costume design; William McCarty, radio code and theory; Charles I. Richards, auto electrics; Amalie W. Schrader, power sewing; Violet R. Widder, apartment-house management; Irma E. Witt, telephone operation; T. A. Woolsey, aeronautics.

Pasadena Technical High School, Hazel Lindley, personal hygiene, and A. K. Thompson, related subjects; Pomona High School, F. A. Glenn automechanics; and Riverside Polytechnic High School, W. B. Trout, automechanics.

Chico Graduates

The four graduates of the industrial arts department of the State Teachers College, Chico, were placed as follows:

Elmer Allinger, general shop, Jackson High School, Jackson.
 Carrol Bailey, automechanics and machine shop, Armijo Union High School, Fairfield.

Robert Ferguson, automechanics, Summerville Union High School, Tuolumne.

Oscar Hollenberg, general shop and farm mechanics, Fall River Joint Union High School, McArthur.



C. V. A. Conference, Summer, 1929

The California Vocational Association held its annual meeting and conference on August 2 and 3 at the State Teachers College in Santa Barbara. This conference marked the most successful gathering of vocational and pre-vocational teachers in the history of the association; it acted as indisputable evidence that the state association is a live, necessary, and growing institution in the educational life and progress of California. Upwards of a thousand members, their families, and friends attended the convention and showed enthusiasm, interest, and appreciation for the events of the two-day session. Members not only carried away inspiration for a new year of work, but also enjoyed making new contacts and renewing old friendships with their fellow workers.

The officers, President Ralph W. Heywood, Jefferson High School, Los Angeles; Vice President Walter C. Patchett, Santa Rosa High School, and Secretary-Treasurer D. M. Rutherford, Petaluma High School, concluded their year's service and, with the various committees, were responsible for the excellent speakers and programs, and for the general success of the affair. The State Teachers College of Santa Barbara and the vocational teachers of that city system, as hosts, bent every effort to make the convention a complete success socially. They deserve much praise.

General Meetings

The first general meeting with R. E. Gilbert, president of the Bay Section of the C. V. A., presiding was held Friday morning, August second.

Benjamin W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles, presented an interesting talk on the application of vocational guidance by the vocational teacher. A résumé of his speech appears elsewhere in this issue of the "News Notes."

The "Progress of Women in the Field of Industry" was the topic of an address by Dr. Emily G. Palmer who is in charge of the Research and Service Center of the University of California, Division of Vocational Education. Dr. Palmer pointed out that there is less and less a sex division of labor and that the coeducational trade school is the best type of organization for giving to girls and women as wide a range of selection of trades as is open to men.

E. E. Ericson, director of the Division of Industrial Education, Santa Barbara State Teachers College, presided over the next general meeting.

Dr. Charles A. Prosser, director of Dunwoody Institute, Minneapolis, spoke with his usual force and interest. Dr. Prosser talked on democratic education and visualized the gauntlet through which boys and girls run. He pictured cold-storage education on one side and the cold-blooded employer on the other. "We must bring living to education and education to living, for life is the greatest educator," said Dr. Prosser, continuing, "We are not interested in the age of the child who leaves school

for work—but the boy himself. On one side we have the 'learner who wants something,' and we need, on the other side, the 'teacher who can give it'." Dr. Prosser emphasized three habits which he stressed: (1) habits of resourcefulness in doing things; (2) habits of resourcefulness in getting facts and ideas; and (3) habits of resourcefulness in thinking straight.

H. D. Hicker, chief of the State Bureau of Civilian Vocational Rehabilitation, interested his listeners with a talk on the work of "Rehabilitation in the Public Schools."

At the Saturday afternoon session Dr. Prosser started again taking, on the program, the place of Howard A. Champion, who was unable to attend the convention. At the business meeting which followed, reports were given, constitutional amendments were voted upon, candidates for the state officers were introduced, and the election was held. The new C. V. A. officers for 1929-30 are listed elsewhere.

Section meetings were held Friday and Saturday afternoons for agriculture, industrial arts, trades and industries for men and for women, vocational guidance, home economics, commercial, and continuation education.

Social Meeting

The arrangements for the comfort and entertainment of the guests, as well as the programs, made this an outstanding convention. On Friday evening a Spanish barbecue was held at Tucker's Grove. The setting was charming and many remained to dance after the barbecue. Garden tours, swimming, sight-seeing trips, and teas were other social opportunities provided.

On Saturday evening a banquet was held at the club house of the Women's City Club. George C. Mann was toastmaster and Verling Kersey, state superintendent of public instruction, made the address of the evening. A play, by the associate players of the Literary Theatre, Los Angeles, and a dance concluded the convention.

—HENRY H. BATCHELDER.

OFFICERS OF THE C. V. A. 1929-30

President—Walter C. Patchett, Santa Rosa High School.
Vice President—G. Laurine Broadwell, Assistant Director of Vocational Education, Los Angeles.
Vice President and Publicity Manager—Henry H. Batchelder, Point Loma High School, San Diego.
Secretary-Treasurer—D. M. Rutherford, Petaluma High School.

Membership in the C.V.A. and A.V.A. may be secured directly from D. M. Rutherford, Petaluma High School, or preferably from the secretaries or presidents of the local sections. A list of these officers follows:

Northern section

President—C. O. McCorkle, Red Bluff Union High School.

North coast section

President—Roy Good, Fort Bragg.

Bay section

President—R. E. Gilbert, 23 Napier Avenue, Oakland.

Secretary—G. S. Snow, 1509 Milvia Street, Berkeley.

Central section

President—T. M. Tetstall, 1342 Echo Avenue, Fresno.

Secretary—Miss Lilah Bradford, Fresno Technical High School.

Central coast section

President—C. E. Knott, California Polytechnical School, San Luis Obispo.

Secretary—J. J. Hyer, California Polytechnical School, San Luis Obispo.

Southern section

President—R. Thistlewhite, Jefferson High School, 388 Compton Avenue, Los Angeles.

Secretary—Charles Tibbitts, Santa Ana High School.

Agriculture Notes from C. V. A. Convention at Santa Barbara

At the ninth annual meeting of the California Agriculture Teachers Association, held in connection with the C. V. A. at Santa Barbara, there were over 140 agriculture teachers present who came from as far south as San Diego, and as far north as Fortuna. This group represented all types and districts of vocational agriculture.

One of the enjoyable features of the convention was the caravan of some 35 machines that left Salinas early Thursday morning, August 1. This caravan was escorted by state traffic officers, and proved a satisfactory method of travel.

The Friday morning session was devoted to State Supervisor Julian A. McPhee, who outlined the general program of vocational agriculture for the coming year. The afternoon session consisted of numerous committee reports concerning many of the activities and teaching problems of the instructors.

Saturday afternoon the C. A. T. A. officers were elected. These officers were: President, Oscar Luksinger, Gonzales High School; Vice President, Richard Gray, Napa Union High School; and Secretary-treasurer, C. O. McCorkle, Red Bluff High School.

Saturday afternoon, at the general C. V. A. election, Walter Patchett, past president of the Agriculture Teachers Association, was elected president, and D. M. Rutherford, Petaluma High School, was re-elected secretary-treasurer.

—B. R. DENBIGH

Vocational Guidance Notes

H. D. Hicker, Bureau of Vocational Rehabilitation, State Board of Education, opened the first sectional meeting on vocational guidance at the Santa Barbara convention on August second, mentioning the need for and methods of carrying on vocational guidance activities in the state. He introduced Clarence R. Briggs, teacher of occupations, Hollenbeck Junior High School, Los Angeles, who illustrated and explained his methods of teaching occupational information to junior high school students. He held that the study of occupations is fully as important as the study of geography or of United States history.

Mr. Briggs was followed by Margaret E. Bennett, supervisor of guidance, Pasadena city schools, who read a most scholarly and inspiring paper on the general subject of guidance activities as planned for the Pasadena school system. Miss Bennett showed clearly the need for orientation courses beginning in the elementary grades and continuing through junior and senior high school education. She held that it was important for children to begin early in life to discover their various interests and abilities and to begin a process of training on lines that promise most for their future welfare.

William R. Balsom, advertising manager of the Western Air Express, delighted the group by his exposition of the occupational opportunities and requirements in the field of aviation. Mr. Balsom referred to his experience in the Los Angeles city schools where he worked continuously for a period of seven weeks showing an instructive moving picture and discussing with the young people the opportunities and requirements in aviation.

Herbert F. Clark, assistant director of vocational education, Los Angeles, lead the discussions following each of these talks.

On Saturday, August third, Elizabeth K. Livermore, Bureau of Attendance and Guidance, San Francisco, was chairman and discussion leader of a vocational guidance group meeting in the same place.

Dr. G. Vernon Bennett, professor of education, University of Southern California, spoke on the "New Aspects of Vocational Guidance," showing how vocational guidance is attracting more and more attention in the schools throughout the country, and especially in connection with certain service clubs. He spoke of the Kiwanis service club, and of what splendid work it is doing in the field of vocational guidance.

"More and more do we see the need of the study of occupations and definitely organized plans of vocational guidance, not only in junior and senior high schools, but also in the colleges and universities," Professor Bennett said. He added that, "... thousands of young people reach the age of twenty and even twenty-five years without much knowledge of human occupations and without any definite decisions as to which occupation they are to follow in order to make a livelihood."

Dr. Bennett was followed by Ruth L. Turner, placement secretary for the Berkeley public schools, who spoke on "Guidance Through the Placement Bureau." Miss Turner's address was so practical that it stimulated many questions and much discussion.

At the close of this sectional meeting there was discussion of the formation of a state vocational guidance association. The method suggested involves:

1. The encouragement of local communities to organize vocational guidance associations and carry on vocational guidance activities.
2. To organize sectional meetings in the annual and semi-annual conventions of the California Teachers' Association and the California Vocational Association.
3. To hold such state meetings of its own members as may best serve the purposes of the organization.

The plan adopted provided for two sections; the San Francisco Bay Section, including northern California and the San Joaquin Valley; the southern California section, including the eleven southern counties in the state.

The plan proposed provides that the presidency and the two vice presidencies shall alternate between the two sections, thus assuring state-wide representation on the executive committee.

There is no doubt that the organization of the state association will aid the cause of vocational guidance throughout California. The field is rich in possibilities and it only remains for the workers in it to till the soil and let the young people of today reap the harvest in the very near future.—HERBERT F. CLARK.

Continuation Education Section

The new continuation-school law formed the basis for discussion at the two section meetings on continuation education at Santa Barbara. The change of name, the administrative blanks and forms, the issuing of work permits, instructional material, and coordination, were a few of the topics discussed.

Arthur E. Paine, director Huntington Park Opportunity School, was elected to represent continuation education on the executive board of the C. V. A.

Guidance by the Vocational Teacher

Benjamin W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles, spoke on the application of vocational guidance by the vocational teacher. Many examples were cited in which the trade teacher found the guidance of his pupils an integral part of his work. The question of the definition of vocational guidance was then discussed and the following definitions compared:

"Vocational guidance" as defined by the National Society for Vocational Guidance, "is the giving of information and advice, and the directing of experience with regard to choosing an occupation, preparing for it, entering it, and progressing in it. As preparation for an occupation involves decisions in the choice of studies, choice of curricula, and the choice of schools and colleges, it becomes evident that educational guidance must be considered a part of vocational guidance."

According to Douglas Fryer, self-guidance consists of:

1. *Getting information.*—A person who is to be counseled must have: (a) Knowledge of himself, his physical and mental abilities, interests, emotional reactions; (b) Knowledge of the occupations, and all the social and economic factors conditioning the occupations.

2. *Making a plan.*—Stimulating the individual to set a goal or objective and form a plan for attaining this objective.

3. *Maintaining freedom.*—The recognition of the individuality of every human being that he is responsible for making a decision is the most important step in vocational guidance.

"An important distinction is to be made between these two definitions. In the first definition, 'Vocational guidance is the giving of information and advice, and the directing of experience with regard to choosing an occupation,' etc. The stress here is laid upon the counselor and that counseling is giving, directing, and advising. The activity of the counselor is emphasized rather than the activity of the one being counseled. Real guidance is having the one counseled do something for himself.

"In the definition by Douglas Fryer, all guidance is really, in the last analysis, self-guidance, and the stress in his definition is upon the activity of the one being counseled and advised—that the counselor's objective is to handle the situation so that the one being counseled can vision his own problem more clearly and work out for himself how to solve it.

"The counselor's obligation, then, is to see that the one receiving guidance has a clear knowledge about himself, his interests, and his potential abilities and about the

occupational fields in which his interest and possibilities would find the fullest realization.

"The next step is to assist the individual to set up an objective or a goal and work out a plan for reaching it; and if necessary, give such encouragement that the individual will desire to realize this plan and start toward its accomplishment. In other words, the aim of all guidance is to stimulate the individual to work out his own plan, to stand on his own feet, and to make his own way in the world. This conception of guidance is in harmony with the best psychology and the best educational practice. One can do very little for an individual who cannot be stimulated to do for himself and work out his own salvation.

"The last step, and one usually not considered, especially by parents and interested friends, is to keep one's 'hands off,' and give the individual freedom to work out his own destiny."

The vocational teacher, according to Mr. Johnson, has four major responsibilities:

- (1) Teaching his trade.
- (2) Selecting those who can profit by the training in any level of the trade.
- (3) Redirecting those who are not suited to their trade.
- (4) Placing or assisting in placing his trainees suitably when they have been trained.

In other words the trade teacher is responsible to his pupils for guiding or counseling, then training, then placing them and helping them to progress in the trade.

"These activities can be accomplished," he said, "only when the teacher knows how to identify certain conditions of adjustment or maladjustment and how to proceed after recognizing the condition. Consequently it is desirable that every vocational teacher make a study of the nature of vocational guidance, how it is carried out, the principles of counseling and the duties and responsibilities of a vocational counselor, and have some training by the case method to develop the ability to give vocational guidance wisely."

As a part of the vocational teacher-training course given by the Division of Vocational Education, both at Berkeley and at Los Angeles, a unit on vocational guidance is included. The objectives of this course are stated as the development of the following abilities:

- A. To give advice relative to the occupation which he knows best, presumably the occupation he is prepared to teach.
- B. To give advice in regard to occupations other than his own.
- C. To cooperate with counselors:
 1. By furnishing information concerning his own trade.
 2. By participating in vocational guidance surveys.
 3. By selection of recruits.
 4. By aiding in preparation of printed material dealing with the guidance program.
- D. To confer with parents and teachers of students relative to choice of vocation.
- E. To cooperate in the placement program, possibly to do placing of trainees in his own trade.
- F. To make personal analyses of pupils.
 1. Through observations.
 2. By tests—psychological, achievement, etc.
 3. By records.

To accomplish these objectives the vocational teacher should have the following information, according to Mr. Johnson's analysis:

- A. Knowledge of how best to present information concerning his trade, as to where such information is available, and particularly as to the part his own trade analysis will play.
- B. Knowledge of how best present information concerning occupations other than his own.
- C. Knowledge of the aim of a vocational guidance program, the function of the vocational counselor, his duties and responsibilities. Understanding of and practice in technique of the vocational survey. Familiarity with methods used by leading cities in preparing and distributing printed material relative to occupations; e.g., Chicago, Milwaukee, Los Angeles, etc.
- D. Understanding of and practice in the technique of interviews, particularly interviews with parents and teachers.
- E. Knowledge concerning the various details necessary to a complete program of placement, including preparation of forms as to agreements, recommendations, etc.
- F. Careful training as to what to look for in personal observation, and how to interpret what is found. Accurate information as to the uses and limitations of tests. Training in the use of records,

grading, etc., with particular reference to limitations.

G. Appreciation of the scope of the vocational guidance program in elementary, junior high, and senior high school, and college.

H. Knowledge concerning the falsity of the claims of the charlatans in vocational guidance—the phrenologists, the character analysts, the “applied psychologists,” etc.

It was agreed by the committee formulating this course that the purpose of vocational guidance is:

1. To give information concerning:
 - a. Occupations.
 - b. Self.
 - c. Society.

in order to

2. Help the individual to formulate a plan.
3. Stimulate interest to follow the plan.
4. Give freedom to realize the plan.

It was accepted that counseling occurs before training, during training, and after training; that adequately trained counselors, adequately trained vocational teachers, and parents are all necessary for any degree of successful accomplishment, and that these aspects should be emphasized throughout the course.

The Continuation-Education Act

By JOHN E. CARPENTER, Chairman
State Committee on Continuation Education

The last issue of the “News Notes” contained a brief report of the final passage of the amended Part-time Education Act. To be accurate, it will be better hereafter to refer to this act, which has resulted from four or more years of effort to improve legislation for education of employed minors in this state, as the “Continuation-education Act.” In every phrase where the former law used the expression “part-time,” the word “continuation” has been substituted. Although many people undoubtedly feel that the term “continuation,” in its narrower meaning, does not convey the real significance of the movement in which we are engaged, yet the opinion is probably unanimous that it is an improvement upon the term “part-time” which has no educational significance whatever.

We are, then, embarking on the venture of “continuation education” for employed minors. We must consider this term still to include three possible functions: namely, occupational extension training (probably of primary importance), occupational preparatory training (of secondary importance), and general continuation of previous schooling. In some states, where the age limits of the group served are fourteen to sixteen, continuation of elementary school studies is a matter of major importance. This cannot be the case in California, with age sixteen and grade eight or nine the normal standard of the pupil entering the continuation group.

In a word, while we have adopted the term “continuation education” to describe our work, we should be careful to consider our young students ordinarily as adults beginning a new and very interesting phase of life, rather than as children with a “last chance” to complete “edu-

cation,” in the sense of the schoolroom accomplishment of childhood. We may well accept the slogan which describes our work as the “first rung in the ladder of adult education,” thinking of adult education as no formal program, but as the continuing process of learning which comes with the experience of a well-directed life.

It is hardly necessary to remind any one who reads the “News Notes” of the history of our law for the education of employed minors in California. The passage of the original act came as the result of the combined leadership of two men, Dr. Edwin R. Snyder, then state commissioner for vocational education, and Professor Robert J. Leonard, then head of the Division of Vocational Education, University of California. After several years of experience, possibilities for improvement were realized and amending acts were passed by both houses of the legislature in 1925 and again in 1927, only to be vetoed each time by the governor. After the failure of the attempted legislation of 1927, several conferences were held, notably the one at Fresno in October, 1927. As an outcome of this meeting a state-wide committee with four regional sub-committees was appointed by State Superintendent Cooper to study the problem from many angles during the ensuing year and a half. The new law, which is published in full herewith, was written as an outcome of these many committee discussions and contains the combined best thought of the many friends who participated in those discussions directly or indirectly.

A bulletin, “Developments in Part-time Education in California,” was published early in 1928, giving the findings of the Fresno conference. Early in the present year another bulletin, “Continuation Education for Employed

Minors in California'' was published in Los Angeles, as a result of the interest and initiative of Vierling Kersey, who had been chairman of the state committee, and who has since become state superintendent of public instruction. This bulletin contains a wealth of findings from the state committee meetings and suggestions of various kinds, including the wording of the law which resulted from those meetings.

Soon after the passage of the new law and its signing by the governor, Superintendent Kersey reorganized the State Committee on Continuation Education and assigned to this new committee the specific task of studying the new law and submitting recommendations for a set of rules and regulations for the conduct of the program throughout the state which may be adopted by the State Board of Education as provided for in the law. This committee held three full-day meetings during the summer. It operated largely through the organization of a number of sub-committees, each of which secured the assistance of persons not members of the original committee. Especial mention should be made of the help given by the members of Dr. Lee's seminar group at the University of California, who made a very thorough and effective study of several problems for the committee. The rules and regulations were adopted by the State Board of Education at its quarterly meeting in September.

During the summer at least two "out-of-state" leaders in vocational education, men of nation-wide reputation, have expressed the opinion that the "set-up" in California for the education of employed minors is the best now obtaining in any state in the union. Besides Superintendent Kersey and Dr. Ricciardi, Dr. Palmer, and Dr. Lee, who have been indefatigable in their support of continuation education in California, many names should be mentioned of those who have helped to bring the program to its present position. At the cost of leaving unmentioned a long list of those who have had an important part in the work, appended here are the names of those appointed by Superintendent Kersey on the present state committee, every member of which has taken his task very seriously and given unusual service to the committee's work. The list follows:

R. F. Aspinall, Fresno
 Sherman L. Brown, Chico
 J. W. Byfield, Bakersfield
 Mrs. Evelyn A. Clement, Sacramento
 Henry O. Dyck, Los Angeles
 Harry G. Hansell, San Francisco
 Mrs. Lillian B. Hill, Sacramento
 Dr. Edwin A. Lee, Berkeley
 T. S. MacQuiddy, Watsonville
 DeWitt Montgomery, Visalia
 Walter E. Morgan, Sacramento
 Miss Emma G. Noonan, San Francisco
 Arthur E. Paine, Huntington Park
 Dr. Emily G. Palmer, Berkeley (Secretary)
 Dr. Nicholas Ricciardi, Sacramento
 Mrs. Anna L. Saylor, San Francisco
 Miss Louisiana F. Scott, Martinez
 R. R. Stuart, Oakland
 L. B. Travers, Oakland
 John E. Carpenter, Sacramento, Chairman.

Besides the Rules and Regulations of the State Board of Education which resulted from the studies of this committee, a bulletin of supplementary information is being planned which will contain additional material that

developed from the committee discussions which could not feasibly be incorporated in such rules and regulations.

Many administrators have not had opportunity to see the text of the new law and there will doubtless be a lapse of several weeks before the proposed bulletin is available; hence, the complete text of the law is printed herewith. It is to be noted that the law now is an integral part of the new school code. The earlier sections (1.350 ff) set forth the requirements for attendance upon the classes established under the provisions of the later sections (3.490 to 3.495).

Text of Continuation Education Act

California School Code Division I, Part II

CHAPTER II—COMPULSORY CONTINUATION EDUCATION

Article I—Persons subject to.

Sec. 1.350. All persons under eighteen years of age who are too old to be subject to the provisions of chapter one of this part, who have not been graduated from a high school maintaining a four-year course above the eighth grade of the elementary schools, or who have not had an equal amount of education in a private school or by private tuition, who are not disqualified for attendance upon these classes because of their physical or mental condition, or because of personal services that must be rendered to their dependents, and who are not in attendance upon a public or private full time day school shall be, and hereby are, required to attend upon special continuation education classes maintained by the high school board of the district wherein they reside, or by the high school board of a neighboring district, for not less than four sixty-minute hours per week for the regularly established annual school term.

Sec. 1.351. The local school authorities may accept, in lieu of the attendance required in this article, an equivalent amount of instruction at a place of employment under the direction of a duly certified instructor and in accordance with the standards and regulations established by the state board of education.

Sec. 1.352. Whenever a minor subject to the provisions of this chapter cannot give satisfactory proof of regular employment such minor shall be required to attend upon special continuation education classes established under the provisions of this code, for not less than three hours per day during the period of unemployment.

Sec. 1.353. The local school authorities may, in their discretion, arrange with the parent, guardian, or other person responsible for any minor employed in a seasonal occupation and excused for a period from attendance upon continuation education classes, for his full time attendance upon a special class maintained for such minor at a convenient season and such parent, guardian, or other person shall become responsible for said minor's attendance upon these classes for said period.

Article II—Persons exempt from.

Sec. 1.360. Should it appear that the interest of any minor would suffer if he were compelled to attend a special continuation education class under the provisions of article one of this chapter, the high school board of the high school district in which said minor resides may exempt him from compulsory attendance upon any such class. Such high school board may not exempt, by authority of this section, a number of minors which shall exceed five per cent of the total number of minors subject to attendance upon continuation education classes in its district under the provisions of this chapter.

Said board shall cause to be issued to any such exempted minor a permit to work, which shall contain a statement of the cause of, and the time covered by, such exemption.

Sec. 1.361. Should any controversy arise in any high school district in this state over the question as to whether

any person is exempt from the compulsory attendance features of this chapter, the school superintendent having jurisdiction over said district shall provide for an investigation, and he shall render a decision.

Sec. 1.362. Should any of the parties to any such controversy not be satisfied with the decision of the superintendent of schools, he may appeal from his decision to the superintendent of public instruction, who shall provide for further investigation, upon the findings of which he shall render a final decision.

Article III—Enforcement of compulsory attendance.

Sec. 1.370. Each parent, guardian, or other person having control or charge of any minor required under the provisions of article one of this chapter to attend special continuation education classes, must compel the attendance of such minor upon the same. He must retain a copy of the permit to work provided for by this chapter and must present the same upon request of any officer of the law, or other person authorized to enforce the provisions of this chapter.

Article IV—Permits to work.

Sec. 1.380. The high school board of each high school district shall designate an officer of said board to issue in its name a permit to work to each minor enrolled in continuation education classes under the provisions of this chapter. Such officer shall also issue a duplicate of such permit for the parent, guardian, or other person having control or charge of each minor concerned, and from time to time such duplicates of said permits as are necessary for filing with his employer.

Sec. 1.381. The form for the permit hereinbefore in this article described shall be prescribed by the state department of education.

Sec. 1.382. The permit hereinbefore in this article described shall be issued to persons complying with the provisions of article one of this chapter.

Sec. 1.383. Permits to work issued during the first school term shall expire five days after the opening of the next succeeding school term of the year, and permits issued during the last term of the school year shall remain valid until five days after the opening of the first school term of the succeeding year.

Article V—Duties of employers.

Sec. 1.390. The employer of any minor, subject to the provisions of this chapter, shall require of said minor a permit to work issued by the high school board of the high school district wherein such minor resides. Said permit to work shall be the authorization of the employer to employ said minor for the period between the date of issuance of the permit and the date of its expiration.

Sec. 1.391. Under no conditions shall any person employ a minor under eighteen years of age who is too old to be subject to compulsory full time school attendance under the provisions of chapter one of this part, and who does not present the permit to work required by this chapter. The employer shall file and retain permanently said permit to work.

Sec. 1.392. The employer of any minor subject to the provisions of this chapter shall, within five days after the beginning of employment, send to the officer of the high school board issuing the permit to work provided for in this chapter, a written notification of such employment. The form of said notification shall be prescribed by the state department of education and shall be furnished to the employer by the officer empowered to issue the permit to work. Said employer shall retain and file with the permit to work, hereinbefore mentioned in this article, a copy of such notification.

Sec. 1.393. Except in agricultural and homemaking occupations, it shall be illegal for any employer to employ a minor under eighteen years of age for a greater number of hours each day than will, if added to the number of hours that such minor is compelled to attend school under the provisions of this chapter, equal eight hours.

Sec. 1.394. It is hereby made the duty of the principal of the school which any pupil subject to the provisions of this chapter attends, to add his hour of compulsory school attendance and employment, and should the sum of such school attendance and employment exceed eight hours for any day of the week, said principal shall give notification to this effect to any employer who may be employing any such pupil after he has already served during said day eight hours of time in compulsory school attendance and that employment combined.

Article VI—Investigation of charges against parent or guardian; penalties for violation.

Sec. 1.400. The high school board of any high school district wherein a minor resides who has violated the provisions of this chapter shall, on the complaint of any person, make full and impartial investigation of all charges against any parent, guardian, or other person having control or charge of such minor for violation of the provisions of article three of this chapter.

Sec. 1.401. If it shall appear upon the investigation provided for by this article that any such parent, guardian, or other person having control or charge of any such minor has violated the provisions of article three of this chapter, it is hereby made the duty of the clerk of said board, or other person authorized by said board to bring such actions, to make and file in the proper court a criminal complaint against such parent, guardian, or other person having control or charge of any such minor, charging such violation, and to see that such charge is prosecuted by the proper authorities.

Sec. 1.402. In cities, and in cities and counties, and in school districts having an attendance officer or officers, such officer or officers shall have power, and it shall be their duty, to make and file the complaint provided for in this article, and see that said charge is prosecuted by the proper authorities.

Sec. 1.403. Should any parent, guardian, or other person having control or charge of any minor who is subject to the provisions of this chapter fail to perform any of the duties imposed upon him by the provisions of article three of this chapter, he shall be deemed guilty of a misdemeanor, and, upon conviction, shall be liable for the first offense to a fine of not more than ten dollars, or to imprisonment for not more than five days, and for each subsequent offense he shall be liable to a fine of not less than ten, nor more than fifty dollars or to imprisonment for not less than five days, nor more than twenty-five days, or to both such fine and imprisonment.

Article VII—Penalties for employer's violation.

Sec. 1.410. Any person, firm, corporation, agent or officer of a firm or corporation, that violates or omits to comply with any of the provisions of this chapter, or that employs or suffers any minor under eighteen years of age who is too old to be subject to compulsory full-time school attendance under the provisions of chapter one of this part, to be employed in violation thereof, is guilty of a misdemeanor and shall, upon conviction thereof, be punished by a fine of not less than fifty dollars nor more than two hundred dollars, or by imprisonment in the county jail for not more than sixty days, or by both such fine and imprisonment for each and every offense.

Sec. 1.411. Failure to produce a permit to work, such as that provided for in this chapter, and a duplicate of the written notification of employment sent to the officer of the high school board, as provided for by this chapter shall be prima facie evidence of the illegal employment of any minor whose permit to work is not produced.

Sec. 1.412. It shall be the duty of the clerk of the high school board, a supervisor of attendance, or other person authorized by said board to bring such actions, to bring an action against any person, firm, corporation, agent or officer of a firm or corporation that employs a minor in violation of the provisions of this chapter.

Article VIII—Disposition of fines.

Sec. 1.420. Any fine collected under the provisions of this chapter shall be paid into the high school fund of the high school district wherein the minor resides.

Article IX—Time of taking effect of this chapter.

Sec. 1.430. The compulsory attendance features of this chapter, the restrictions relating to the employment of minors under eighteen years of age, and all penalties relating thereto shall become effective upon the taking effect of this act. The provision for the attendance upon special classes for three hours a day by minors who can not give proof of regular employment shall take effect on the first day of July, 1930.

Division III, Part IV, Chapter I.**Article VII—Continuation education classes and programs of guidance, placement and follow-up in high schools.**

Sec. 3.490. The high school board of each high school district must establish and maintain a program of guidance, placement and follow-up for all minors within the district subject to the provisions of chapter two of part two of division one of this code.

Sec. 3.491. The high school board of each high school district must establish and maintain special continuation education classes whenever there are fifty or more minors residing within the high school district who are subject to the provisions of chapter two of part two of division one of this code.

Sec. 3.492. Special continuation education classes established under the provisions of this article must provide at least four sixty-minute hours of instruction per week for each minor within the high school district who is subject to the provisions of chapter two of part two of division one of this code.

Sec. 3.493. Classes established under the provisions of this article must be maintained between the hours of eight a.m. and five p.m.

Sec. 3.494. Classes established under the provisions of this article must provide suitable instruction for the various individuals for whose benefit they are established.

Sec. 3.495. The state board of education shall have the power and the duty to prescribe and enforce standards and regulations for the organization and administration of programs of guidance, placement and follow-up, for programs of coordination and instruction in continuation education, for the special reimbursement thereof, and for the certification of teachers and coordinators for continuation education.

New Positions for Trade Teachers

A number of teachers of trade and industrial subjects are reported as making certain changes in positions:

Wilbur H. Beery will teach automechanics in the Mirando High School.

F. J. Bloss, mill-cabinet teacher has been employed in the San Jose public schools.

David E. Culbertson of Martinez, will handle the general shop work at Weaverville High School.

Miss Estelle Cross, who completed her vocational-teacher training in 1925 and who has been supervising teacher-training at the University of Oxford, England, the past year will teach art at the Los Angeles Junior College.

Hilton F. Lusk, formerly instructor in aeronautics, at the College of the Pacific, Stockton, has been made Dean of the Boeing School of Aeronautics, Oakland Airport.

Leland S. Prior has been granted a year's leave of absence from Polytechnic High School, San Francisco, to enter the Naval Air Training School at Pensacola, Florida.

H. W. Struckman has left the Watsonville schools to teach automechanics in the Tracy High School.

William E. Wright, general shop instructor at Biggs High School, has gone to the Boeing School of Aeronautics, Oakland Airport.

F. F. of A.

Approximately six hundred students of agriculture from 64 high schools of the state were in attendance at the first annual convention of the Future Farmers of America held at Sacramento on Thursday, September 5 of this year, during the State Fair. The officers elected for the ensuing year are:

President—Lowell Edington, Napa High School.

Secretary—Roy Hamilton, Red Bluff High School.

Treasurer—Frank Parmenter, Chaffey Union High School, Ontario.

Reporter—Austin Hill, Ripon High School.

Yell leader—Leroy Wright, Red Bluff High School.

Advisor—J. A. McPhee, State Department of Education, Sacramento.

Vice presidents will be elected by each of the six sections into which the state has been divided.

Future Farmers of America is the name of a national organization of students of vocational agriculture whose purpose is to hold the interest of boys in scientific farming and train them for leadership in their own group.

Agriculture Teachers in October Meetings

Two important meetings of teachers of agriculture in the San Joaquin Valley were the regional meeting in Modesto on October 12 and Elmhirst Day at the Elmhirst ranch near Merced on October 19. At the regional meeting in Modesto the speakers were Dr. J. P. Iverson of the State Department of Agriculture, Judson Aspinwall of San Jose State Teachers College, E. W. Everett, regional supervisor, C. S. Morris, dean of Modesto Junior College, and Julian A. McPhee, chief of the Bureau of Agriculture Education, State Department of Education.

The Future Farmers of America were featured on Elmhirst Day. Gordon Harlan of Riverdale, winner of the animal husbandry project contest for 1929 was presented with the prize, a pure-bred Hereford heifer, by Joe Elmhirst. Talks on feeding and breed types, and on fitting beef for show preceded the awarding of the prize.

Evening and Part-Time Classes in Agriculture

During the past year 64 evening classes for farmers and three part-time-day classes for the out-of-school farm boy have been organized in California. The three high schools which have the part-time classes are Marysville, Ripon, and Napa, conducted with a total enrollment of seventy. The courses given were agricultural economics in Marysville, poultry and horticulture in Ripon, and farm mechanics and poultry in Napa.

City Supervisor of Home Economics

Mary E. Davis is the new supervisor of home economics and cafeterias in Oakland this year. Miss Davis received her training at a normal school in New York state, at Columbia University, and at the University of California. Miss Davis has been teaching home economics in the Lowell Junior High School in Oakland for the past five years. In her new responsibilities she will have the supervision of 68 home economics teachers and of 32 school cafeterias.

THE TELEPHONE OPERATOR

(Continued from page 65)

employees having worked one year or more. A great advantage to employees is that, while work may be uninterrupted, leaves of absence can easily be arranged. For women desiring them, "broken hours" or "partial hours" can be arranged, this being a great advantage to married women. Picnics, dances, basket ball, and tennis are arranged by the company to satisfy the social and recreational needs of its workers. In each central office, a lunch room is provided, selling food at cost. The average lunch costs about fifteen cents.

Promotion

All executive positions are filled from the ranks. In the traffic department of the company no outside people are ever brought in to fill the better positions. Every chief operator was once a switchboard operator.

The first promotion is to that of supervisor. There is one supervisor for every five girls. It is her job to take any call that is, in any way, unusual so that the speed of the completion of calls will not be reduced by a girl being delayed on one call. The supervisor's salary is from \$95 to \$120 a month. For the girl who likes clerical work, there is the position of central office clerk, which job consists of keeping the central office records. For the girl who is socially poised, and has good clothes there is the work of demonstrating telephone equipment and giving talks to clubs, schools, etc.

The highest position that a girl can reach in the telephone service is that of chief operator. A chief operator has complete charge of a central office, a position of no little responsibility. She makes the final decision on all questions. Besides needing a thorough knowledge of all phases of operating, she must be a person of tact since she has in her charge from 50 to 150 girls. She O. K.'s the time schedules, makes up the payrolls, and recommends increases in salary. She must see to it that the central office records are accurately kept by the central office clerk; she must decide whether more or fewer lines are needed and whether more or fewer girls are needed. She looks over the service, observing records and decides upon the performance of the office—whether it is good or bad. It is in her that all authority and responsibility is centered. For this reason, many of the girls interviewed felt that the job carried too much responsibility and that they would not care for the position. The salary is from \$150 to \$175 a month. The minimum time necessary to become chief operator is five years.

Every girl has the chance to advance beyond the position of operator should she desire it. Some, however, after being supervisors, wished to return to operating as being more "restful." One girl in every five becomes a supervisor, and of these, one in every five goes to clerical work, testing, or observing. Of the number of girls employed, only one in 150 will become a chief operator.

The American Telephone and Telegraph Company is composed of twenty-five operating companies, of which the Pacific Telephone and Telegraph Company is one. These operating companies are self-governing units, so that local practices vary somewhat between them. Also state laws, necessarily, make variations between the workings of the different companies.

NEW BOOKS

Have We Kept the Faith? By C. A. PROSSER and C. R. ALLEN. Century, 1929. 429 pages.

This is an unexpected title and thesis for two men who call themselves "rioters in the streets of the educational city," and who present the "creed of the progressive." "The faith of the fathers" is an unnecessary backing for their thesis which will stand by its own logic. The changing conditions and the necessary changes in education to meet these conditions are emphasized in a most readable way. The new educational service for the wage-earner, as the last step in making education democratic, is the crux of their argument. Most of the readers of this book will agree, for the most part, with the authors. It is hoped that those who are still influenced by "the dominating dead" will also read this stimulating text.

Principles and Practices of Vocational Guidance. By I. DAVID COHEN. Century Company, 1929. 471 pages.

The form for studying a "case" and the principles involved in giving vocational advice are outlined in this recent book on guidance. Certain activities are recommended, aside from the personal interview as an aid to guidance. The first activity listed is "testing for aptitudes." The author presents a psychological theory which may easily be questioned. Chapters on collecting and disseminating occupational information, vocational guidance for adults, and special problems relating to guidance complete this book which has been organized as a text on guidance with questions and reading lists at the end of each chapter.

Guidance and Education of Prospective Junior Wage Earners. By F. M. TRUMBULL. John Wiley and Sons. 298 pages.

In the review of Mr. Trumbull's study of young workers in Rockford, Illinois, which appeared in Dr. Anna Y. Reed's book, "Human Waste in Education" two years ago, it seemed that Mr. Trumbull had furnished evidence to substantiate Dr. Reed's contention that it is a great waste to provide schooling for certain pupils of low mentality. Now that Mr. Trumbull's study is in print, and all his conclusions can be read, it is evident that he believes in a very practical way in the obligation of the school to provide education for the slow group as well as for the more favored pupils, expressed in the following words, "The school is obligated to educate even the dull to capacity. If such are eliminated without preparation which will give them advantageous entry into an occupation, there is a double loss. The school fails in the purpose for which it is maintained and the community loses because of the presence of a low-grade and less efficient worker."

Mr. Trumbull gives a very full discussion of the problems and objectives of the continuation school and the organization of cooperative training and supervised employment for pupils in continuation classes and in regular apprenticeship. Counseling and placement are treated very fully, and the best practices in leading cities are pointed out. Any one who has the responsibility for guidance, training, placement or follow-up of young wage earners will find Mr. Trumbull's book of great value.

HOLBROOK, H. L., and MCGREGOR, A. LAURA. *Our World of Work*. Allyn and Bacon.

One of the most interesting features in this book on occupations for pupils of junior high-school age is its ample illustrations, among which are pictures of men and women who have succeeded in various occupations. The human interest note throughout gives an inspiration which many texts in this field lack. The fields touched upon are agriculture, business, industry, homemaking, and the professions and allied services. The style of writing seems too personal, however, for use in classes above the junior high school, and it is doubtful if the book is mature enough in style for even ninth-grade pupils. It is an excellent text in sociology for the younger boy and girl.

Business and ideals: a syllabus of discussion outlines for groups of business employees. The Inquiry, 129 East 52 Street, New York City, 1929. Price: paper, 75 cents; cloth, \$1.25.

This syllabus is the result of the experience of many local discussions of young employees regarding their problems of employment. Such discussions to be profitable, must, it is pointed out, be planned and carefully prepared for. Some of the topics outlined in the syllabus are:

What work is worth while?

What is square in changing one's job?

Should an employee accept gifts?

The appendix gives a few "opinion tests," and shows how they may be used to clear up prejudice against certain topics or ideas. The method is one which applies admirably to instruction in continuation schools.

—E. G. PALMER.

BOOKS RECEIVED

BRAY, HELEN A. *Textile fibers, yarns, and fabrics*. Century, 1929. 236 p. Price, \$2.50.

COBAUGH, H. B. *Shop drawing for beginners*. Bruce, 1929. 32 p.

CRISPIN, F. S. *Dictionary of technical terms*. Bruce, 1929. 287 p. Price, \$1.25.

DEVETTE, WILLIAM A. *Short course in mechanical drawing*. Bruce, 1929. 141 p.

MATHEWSON, F. E., AND STEWART, J. L. *Notes for mechanical drawing (revised)*. Bruce, 1929. 62 plates, 104 pages. Price, \$1.48.

STRUCK, F. T. *Methods in industrial education*. John Wiley, 1929. 214 p. Price, \$2.75.

WRIGHT, J. C., AND ALLEN, C. R. *Efficiency in education*. Wiley, 1929. 405 p. Price, \$3.00.

WRIGHT, J. C., AND ALLEN, C. R. *Efficiency in vocational education*. Wiley, 1929. 443 p. Price, \$3.00.

COMING EVENTS

American Vocational Association Convention, New Orleans, December 5-7, 1929.

California Teachers' Association—

Central Section, Fresno, November 25-27.

Bay Section, Oakland, December 16-20.

Central Coast Section, Monterey, December 16-20.

Southern Section, Los Angeles, December 16-20.

Continuation Education Conference, Fresno, January 11.

SECOND FRESNO CONFERENCE

The State Department of Education is calling a second conference on continuation education at Fresno on January 11 to hear reports on the work of the State Committee on Continuation Education, on the new Continuation Education Act, and on the proposed work for the committee during the ensuing year. Not only administrators and teachers directly concerned with continuation education, but also supervisors of attendance, social workers, employers, and others interested in the education of employed minors will be urged to attend.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

No. 4. Bulletin No. 3. *Coordination in Part-time Education*. March, 1921.

No. 5. Bulletin No. 4. *An Analysis of the Work of Juniors in Banks*. May, 1921.

No. 6. Bulletin No. 5. *An Analysis of Clerical Positions for Juniors in Railway Transportation*. August, 1921.

No. 7. Leaflet No. 3. *Selected Reading List for Administrators and Teachers in Part-time Schools*. September, 1921.

No. 8. Bulletin No. 6. *Part-time and Continuation Schools Abroad—Reprints*. November, 1921.

No. 10. Leaflet No. 4. *Recreational Reading for Part-time and Continuation Schools*. March, 1922.

No. 13. Bulletin No. 14. *The Administration of the Part-time School in the Small Community*. Part One, March, 1924. Part Two, May, 1924.

No. 14. Bulletin No. 18. *The Part-time School and the Problem Child: An Investment in Social Insurance*. April, 1926.

No. 15. Leaflet No. 6. *A Digest of Laws for Working Boys and Girls*. June, 1927.

TRADE AND INDUSTRIAL SERIES

No. 2. Bulletin No. 13. *Analysis of the Cabinetmaker's Trade*. September, 1923. Price, 40 cents.

No. 5. Bulletin No. 19. *The Problem of Apprenticeship in the Six Basic Building Trades*. September, 1926. Price, 50 cents.

No. 6. Bulletin No. 21. *An Analytical Study of the Duties of the Chemical Laboratory Technician*. June, 1927.

No. 7. Bulletin No. 22. *Selection and Purchase of Equipment for Trade and Industrial Classes*. June, 1927.

AGRICULTURE EDUCATION SERIES

No. 3. Bulletin No. 17. *Farm Mechanics in the Agriculture Curriculum*. June, 1926.

HOMEMAKING EDUCATION SERIES

No. 1. Leaflet No. 5. *A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics*. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

No. 2. Bulletin No. 20. *A Study of Vocational Conditions in the City of Fresno*. November, 1926. Price, 50 cents.

NEWS NOTES

Vocational Education News Notes, v. III, Nos. 1-9, October, 1924-June, 1926 (No. 7 out of print); v. IV, Nos. 1-5, November, 1926-April, 1928; v. V, Nos. 1-4, November, 1928-November, 1929.

Agricultural Project Competition

By B. R. DENBIGH

Director Agricultural Department, Modesto High School

Three years ago a small group of Smith-Hughes agriculture teachers in the Northern Coast section of California wished to promote interest and activity in their students' agricultural projects. They hoped to increase the size and scope as well as the duration of their own boys' projects. These teachers, after many conferences, finally outlined a temporary score card and a set of rules for judging the value of such enterprises.

Growth of Contests

The first contest was limited and many problems had to be studied and worked out during the actual contest. However, as a result of the success of this experiment, the following year this type of activity was enlarged to take in two counties. The past year this activity was taken up by the San Joaquin Valley teachers, representing some thirty or more agricultural high schools. The Sacramento Valley is now contemplating holding similar contests. This will mean that many of the agricultural schools in Northern California will participate in determining which of their own students have the best projects. It may even become necessary to hold state championship project contests in the near future, due to the progress and sincere interest shown by the participating agriculture teachers and students.

Advantages of Contests

There are four or five outstanding reasons why this type of work has progressed so rapidly. First, it encourages larger and more realistic projects with better records; second, it provides an activity for the student who is not interested in judging; third, it provides a source of competition which is directly connected with the boy and his farming activities; fourth, it provides a very satisfactory

way of learning what the other agricultural teachers are doing in the way of projects; and fifth, it offers a valuable opportunity to hold a project field day, in which the students will feel a special interest because of their knowledge of the participants and conditions. They are eager to see how their own project compares with that of their neighboring fellow-student.

In the past contests, score cards have been used in an attempt to evaluate and compare projects. Twice since then these score cards have been revised in an attempt to improve them, the latest one of which is given below:

I. Quality and thoroughness of work	25
II. Practicability	10
III. Management	10
IV. Record book	25
V. Scope and size	15
VI. Oral questions (5 minutes)	15

This year it is doubtful if any definite score card will be used at all. In judging the boy on his interest, participation, success, and activity, it is impossible to work out a numerical ratio. These factors must be studied and weighed by the judge, through his mature knowledge and experience.

Method of Judging

The judges this year will be instructed in the

salient factors underlying a successful project, and left to place the boys' projects as they determine by the visits and interviews. The judges should be sincerely interested in the development of both the boys and agriculture within the community, as well as being both practical and experienced. It is desirable to have judges of diversified opinions and vocations, in order that the reaction to an individual's project may not be biased by a particular judge's opinion. Farm advisers, agricultural commissioners, farmers, neighboring agricultural teachers, board members, and other agricultural workers prove competent to act in this capacity. It is not advisable to have a



RAISING AND BREEDING OF SHEEP

Home project of student in agriculture in Modesto High School

single judge because of his limited knowledge and because he, himself, will not want to examine all the projects alone and take the responsibility of ranking the boys. Two judges will prove satisfactory if one is interested in livestock and the other in horticulture. Three or more judges are desirable as there is a better understanding of the many types of agriculture to be considered, and therefore better decisions are made.

The men who originated this enterprise felt, at the time, that it would be impossible to judge projects in such a manner that one individual, outstanding project could be selected. With this idea in mind, they decided to divide all projects into three groups. The three groups, animal husbandry, horticulture, and poultry, were decided upon as primary divisions, separating poultry from other animal husbandry because of its unique features and because of the many poultry projects carried on by the boys. The following year it was found desirable to add a farm mechanics contest, as numerous boys had equipped home shops, or had erected buildings, or were conducting other farm mechanics projects.

Project Divisions

Due to the number of contestants who will be entered in the 1930 contest it is going to be necessary to have a more detailed division of project types, as it is impossible to rank conscientiously and fairly projects that are very divergent. This year the following divisions will be made:

- | | |
|--------------------------------------|---------------------------|
| 1. Field crops | 7. Dairying |
| 2. Truck crops | 8. Hog raising |
| 3. Vines (grapes) | 9. Egg production |
| 4. Tree fruits | 10. Hatching and brooding |
| 5. Sheep raising | 11. Home building |
| 6. Beef raising | 12. Home shop work |
| 13. Home-made or repaired implements | |

This may appear to make too many divisions, but it was felt desirable to attempt as many divisions as possible this year to find out what the results would be. This whole activity is still more or less in a transitional stage and requires considerable testing and trying before definite annual rules can be made.

In order to prevent an excess amount of traveling, and also to prevent a school from entering all thirteen types of projects, some of which might not be worthy, it was deemed advisable to limit each school to any five agricultural projects and one farm mechanics project. Thus the separate schools would eliminate many project visits and so reduce the time and services of the judges. Another rule is that the boy and his project record must be present when his project is judged. The agricultural teacher must also be present, although he is not entitled to enter the discussion between the judge and the boy. The judge has the privilege of interrogating the student for a period of five minutes if he wishes.

Here, at the Modesto High School, we are very well satisfied with the results we have obtained by participating in this type of activity. We find the boys are more interested in their projects and are really interested in attempting worth-while and fair-sized farm enterprises. The freshmen and sophomores are especially interested in starting the continuous type of project, looking forward to finishing school with a bank account of from \$500 to \$1000. Consequently we are enthusiastic over the results and are anxious to see this type of work succeed.

Joint Sectional Meeting at Colusa

The agriculture teachers in the section including Gridley, Marysville, Auburn, and East Nicolaus, met jointly with teachers from the section including College City, Princeton, Colusa, Willows, and Maxwell at Colusa at noon, January eleventh. About sixteen men were present. After luncheon at the Riverside Hotel the men met at the high school, where C. G. Beck led the meeting by showing certain still pictures he had collected. A. G. Rinn then led the discussion on teaching devices. It was agreed that a teaching device was a contrivance used to further the teaching process as distinguished from a teaching method which is a procedure. Those present then made suggestions of teaching devices. In all, eighteen were mentioned and were as follows:

Daylight screen, demonstrations, lectures, student competitive questions and answers, reading, recitations, observations, projects, charts, moving pictures, still pictures, examinations, use of blackboards, written reports, student research, experiments, radio talks, and samples.

Each instructor was asked to arrange these teaching devices in the order of their importance, to list at the top those which he considered most important and at the bottom those least important. A score for each device was determined by taking the number at which it was placed in the list and adding all of the numbers for those present, which would constitute the score. For example, No. 1 may place a teaching device second; No. 2, tenth; a total score would be 12. When the scores were finally all totaled it was found that they had been scored as follows: (The scores show the relative importance in inverse proportion.)

Projects, 16	Student competitive questions and answers, 126
Observations, 48	Experiments, 130
Demonstrations, 63	Samples, 130
Daylight screen, 70	Use of blackboards, 132
Examination, 81	Recitations, 141
Reading, 99	Written reports, 169
Charts, 106	Radio, 179
Moving pictures, 116	Student research, 180
Pictures, 123	Lectures, 196

It is significant to note that projects were rated highest as teaching devices, and lectures, lowest. In summing up these devices, it was agreed that, relatively speaking, more time should be put in on those teaching devices which all had agreed were more effective, and so far as possible we should eliminate those devices which were comparatively ineffective. The large number of devices which seemed to be of almost equal importance might all be used at times to give variety to the program.—A. G. RINN.

Christmas Fat Livestock Show

Probably the most spectacular activity so far participated in by the high-school vocational agricultural students in California was held in connection with the Christmas Fat Livestock Show in Los Angeles on December seventh. There was a total of 93 teams in the livestock judging contest and 15 teams in the dairy cattle judging contest. In addition, there were delegates from 83 Future Farmers of America Chapters of California.

The Santa Fe, Western Pacific, Union Pacific, and Sacramento Northern Railroads furnished free transportation and the Southern Pacific Railroad gave two-thirds

the one-way fare for the round trip to the boys and teachers from all parts of the state. Many of the boys who made the trip rode for the first time on a train. Every one who attended had a wonderful time during his stay in Los Angeles.

The scores in the livestock judging contest ranged from 712 to 992. The five schools which scored over 900 were: Lodi, Bieber, Vacaville, Ontario, and Wilmington.

NOTES ON AGRICULTURAL EDUCATION

Growth of the Program

In the year 1920 there were less than 25 high-school vocational-agricultural departments in California. At the present time there are 151 such departments in the state. In 1926-27 the average student enrollment per high-school agricultural department was 33; in 1927-28 it was 39; in 1928-29 it was 43; and in 1929-30 it will be approximately 48. These are high averages, considering the fact that a large percentage of California schools have an enrollment of less than 100 in the entire student body. There is an average of 2.4 agricultural teachers per school. In addition to these schools, there are 47 high schools giving vocational agriculture that do not receive reimbursement. Most of these are in the larger cities, and the work they are doing is principally landscape gardening, nursery work, and informational courses in agriculture. This group participates in the activities of our state-wide program the same as those schools receiving reimbursement.

Program for Up-grading Teachers

There is a definite program for the up-grading of teachers of agriculture in this state. This is done through bi-monthly visits to the schools by the agricultural supervisory staff, and by frequent meetings. The state is divided into fifteen sections, and the agricultural teachers of these sections meet once a month. The state is again divided into six regions and these regions meet twice a year. There is one annual meeting of the teachers of agriculture in the state. Teachers attend these meetings voluntarily. However, the average attendance for the last two years has been 95 per cent. The meetings are very interesting and definite programs prepared at the beginning of each year are carried out.

Project Reports

The project reports of the Smith-Hughes students of vocational agriculture for California, during 1927-28, showed a profit of \$301,277.06. The project reports for the year 1928-29 are being compiled at the present time and they indicate there will be an increase in profit of more than \$50,000 over the previous year.

Future Farmers of America

The Future Farmers of America is an organization which was established in California a year ago. The organization received charter number four in the national organization. At the first Future Farmers of America convention held in Kansas City, Arthur Ketterlin of the Santa Rosa High School represented the California chapter. He was elected as fourth vice-president in charge of the eleven western states.

The first state-wide convention of Future Farmers of America was held at the State Fair in September, 1929. The second one was held in Los Angeles on December 7, 1929. Within a year the organization has grown to a

total of 83 local chapters, with a membership of approximately 3500 students. This organization is limited to vocational agricultural students in the departments that are following the California State Plan for vocational agricultural education. It is expected that before the end of this year there will be over one hundred local chapters in the state. There is keen interest on the part of the agricultural students in connection with this program.

Judging Contests

The Chaffey Union High School, Ontario, representing California at the National Livestock Judging Contest for vocational agricultural students, at Kansas City, won the national championship.

The Lodi Union High School, representing California at the National Dairy Show at St. Louis, won the national championship in dairy products judging.

Trip to London as Prize

The Albers Milling Company is offering as a prize for the outstanding Smith-Hughes student of vocational agriculture a trip to London. The State Department of Education will have charge of the arrangements for the selection of the student. Definite rules and regulations for the selection have not been issued as yet. The World Poultry Congress will be held in London, and the boy who is selected to attend this congress will leave California for Vancouver, B.C., the first week in July, will travel through Canada to Montreal and then on to London. All of his expenses will be paid.—J. A. MCPHEE.

Unification in County Agricultural Programs

The two agencies for improving agricultural methods followed in this state are the high-school teachers of vocational agriculture, and the agriculture extension service. While the cooperation has always been close between these two agencies, there has been a tendency in the past for each organization to carry out its own program of work without considering the program of the other.

To permit both organizations to gain their ends more effectively, a series of county meetings have been held in the San Joaquin Valley to unify the two programs wherever possible. These meetings have been held in Stanislaus, Fresno, and Kings counties and have been attended by representatives from the extension offices, each high school in the county, and in some cases the agriculture commissioner of the county.

The objectives of these meetings might be listed as follows:

1. To acquaint each group with the work carried on by the other group.
2. To unify recommendations sent out in the same community by one agency or the other. (Conflicting recommendations serve only to break down both educational services.)
2. To determine on specific phases of agriculture improvement which should be stressed during the year.
4. To set dates that will not conflict with other important meetings.
5. To avoid any overlapping in work covering similar fields.

The meetings which have been held so far have been very worth while, and in every case the groups have voted for additional meetings.—E. W. EVERETT.

New Bulletin Dealing with Home Economics

By MAUDE I. MURCHIE,

Chief, Bureau of Homemaking Education,
State Department of Education

That part of the California Plan for Vocational Education dealing with homemaking education has been recently revised, to extend to the school system the opportunities in homemaking education made possible through recent congressional and state legislation, and was approved by the Federal Board for Vocational Education on August 28, 1929. A new bulletin dealing with federal- and state-aided classes in home economics organized under the federal and state vocational education acts including the late George-Reed Act, has recently been issued. This bulletin, No. C-2, sets forth the ways and means of putting into effect vocational programs and classes in homemaking for girls and women, respectively, in accordance with the rules and regulations of the California State Plan for Vocational Education. Part I deals with programs for girls of high-school age, and Part II with classes for women. Copies of this bulletin may be secured from the State Department of Education, Sacramento.

Since 1917, vocational home-economics education has been developed in the state in accordance with the provisions of the Smith-Hughes Act. Under the provisions of this act, only 20 per cent of the trade and industrial fund is available for the promotion of homemaking education. Since the inception of the program in California, the claims presented by the local districts on account of the maintenance of vocational homemaking instruction, have exceeded the funds available to meet these obligations.

In 1929 the state legislature accepted the provisions of a congressional act approved by President Hoover on February 5, 1929, making additional provisions for education of less-than-college grade in agriculture and in home economics. This congressional act is commonly spoken of as the George-Reed Act, and provides a continuing appropriation, increased yearly, for the period of the next five years.

The administrative difficulties met by school officials in certain schools, in the past, in fulfilling the requirements of the state plan, have been taken into consideration in this revision, and all the elasticity possible under the legislative acts have been provided. A study of the bulletin showing the three types of all-day programs for which reimbursement will be allowed will assist school authorities in the selection of suitable programs in homemaking for girls of high-school age.

SCHOOL PROBLEMS PROMINENT ON MENTAL HYGIENE PROGRAM

Schools, education, and the relation between teacher and child will hold prominent places on the program of the First International Congress on Mental Hygiene, just announced from administrative headquarters, 370 Seventh Avenue, New York City. This Congress is to be held at Washington, D.C., May 5-10, 1930. It is expected that educators, psychiatrists, general medical practitioners, psychologists, social workers, and others will be present from many countries. Among the subjects bearing on

education listed on the program are the following: Problems presented by children of special types; special problems of adolescence; value of mental hygiene in the school and classroom; the training of parents and teachers to a more thorough understanding of the child; mental hygiene in personnel work and vocational guidance.

It is the purpose of the Congress to survey mental hygiene advance throughout the world and to draft a list of objectives to be sought for in the mental hygiene field in all countries.

Dr. William A. White, psychiatrist of Washington, D.C., is president of the Congress, and Clifford W. Beers is secretary-general. The administrative secretary, John R. Shillady, will be glad to answer all questions.

You Can Make It

A recent bulletin published by the United States Department of Commerce, in conjunction with the national committee on wood utilization, should be of more than passing interest to all vocational teachers in agriculture and trades and industries. The title of the bulletin is "You Can Make It," and it may be obtained from the U. S. Government Printing Office, Washington, D.C., for ten cents a copy.—*The Vocational Oregonian*.

Cooperative Training Proves Efficient

The cooperative trade program in San Jose was started in the fall of 1927-28, with 31 boys on a cooperative basis that year. In 1928-29 there were 45 boys in cooperative training; up to the present time (January, 1930) there are 29 boys in this type of training. The number will probably be increased to 45 by the end of the year.

Of the ten "coop" boys who were graduated in 1927, seven are now working at the trade; of the 17 who were graduated in 1928, 15 are working at the trade; and of the 22 who were graduated in 1929, 20 are working at the trade. This shows that a little more than 85 per cent of those who were graduated are working at the trade for which they were trained.—A. R. NICHOLS.

Finding Your Vocation

Kitson, Harry D. *How to Find the Right Vocation*. Harper Brothers, 1929. Price, \$2.50.

Finding your vocation is presented by Dr. Kitson in this, his latest book, not as a secret, slight-of-hand process, but as an investigation requiring a study of certain economic facts, the reading of biographies, and the observation and questioning of persons who know the occupation in question. Many factors, according to Dr. Kitson, must be recognized as influencing one's decision and no one consideration of sentiment or social prestige should be allowed to lead one astray. Each vocation is presented as a succession of steps and must be viewed, not as a single job, but as a sequence.

The method of selection of a vocation, how to take the first step, how to progress, and how to measure your progress are all told in clear, interesting, yet subtle style. The illustrations provide a note of humor which make the book delightful reading.—E. G. PALMER.

A Science Project for the Sheet-Metal Shop

By RICHARD H. BEHRENS, Berkeley High School

In spite of numerous attempts to render specific the purpose and content of related science in the vocational program, considerable difference of opinion seems to exist among vocational educators. There are at present effective vocational programs, in so far as the trades are concerned, the teaching of which rests on a solid foundation and is, to a large extent, susceptible to measurement by means of placement records followed over an increasingly longer period. As far as the related subjects are concerned, however, there seem to be only misgivings. Whatever is known about them seems to have been learned largely by negative experiences. On only two points does there seem to be general agreement: first, that the wrong kind of subject-matter is being taught by the wrong kind of teachers; and, second, that the qualifications of the ideal related-subjects teacher are so inclusive that it may be some time before he will manifest himself on earth.

Efforts at Securing Content

Efforts at solving the problem of related technical instruction have for the most part been directed at determining the *content* of the related subjects. The great ramifications of present-day trade knowledge, although they may be roughly classified, as has been done more or less satisfactorily by authors of trade-analyses, cannot be taught in the time allotted to related-subjects in the all-day trade school. A few fundamental phases here and there can be taught successfully, but any attempt to cover *all* the ground of the science of a trade, for example, must result in purely superficial considerations of factual material which can give the student but little power, except in lesson-learning.

The core of the difficulty seems to be due to the fact that we have over-reached ourselves in stating the problem. We may list *ad infinitum* factors and principles involved in the mastery of any given trade, but such lists are practically valueless until they can be rendered useable in the form of definite trade problems. Now, of course, no one except a tradesman can perform this feat with understanding and thoroughness and he is, in fact, on the brink of taking over the related subjects were it not for considerable misgivings on the part of experienced teacher-trainers and administrators who feel that the tradesman falls somewhat short of filling the bill as a science teacher.

At present, therefore, the trade teacher and the related-science teacher are occupying the field and will probably continue to do so, each supplementing the other more or less vaguely. Since the interests of the classroom teacher are immediate and practical, he will want to know just what phase of the related science should be taught on the job and what should be included under what is now being taught as trade-science. Every one seems to agree that the job should be taught as a unit "on the job" by the only person qualified to teach it—the trade teacher. Related science, so-called, *can* be taught as scientific method applied to trade problems.

Scientific Approach to Trade Problems

If the emphasis in teaching related science is shifted from the *extent* of the science content of the trade to that

of a direct *scientific attack* on trade problems, a Herculean weight will be immediately removed from the shoulders of both teacher and student; both will then enjoy greater freedom in choosing the problems to be attacked according to their abilities and interests. This method of teaching related science seems particularly satisfactory with vocational students since any science class may include members who come from different shops; it also helps to take care of wide individual differences since the student both chooses his subject and develops his method of attack with the help of periodic conferences with the teacher. As this science work is organized, the student learns by thinking consistently and scientifically about his trade problems; in the course of his work a certain orientation toward sources of reference is forced upon him by the work rather than by the teacher. In all probability as many problems will be started as there are pupils in the class.

A Project in Sheet-Metal Work

To illustrate the possibility of drawing upon the field of science to initiate a bit of trade-science research, the following project may be taken as fairly typical:

Those familiar with the recent development of the sheet-metal trades know that the sheet-metal worker is no longer just a tinsmith. The results of metallurgical research have given the sheet-metal worker a wide choice of materials of widely differing properties to work with. The chrome-steel and chrome-aluminum alloys are typical examples of the new metals now used in the sheet-metal trades. A knowledge of the properties of these materials under a variety of industrial conditions is a valuable asset to the worker who may be called upon to determine the sheet-metal best suited to the work which he is to undertake. The following project was undertaken by a group of boys from the sheet-metal shop of the Berkeley High School in the manner described below.

Strips of sheet-metal, accurately cut to a rectangular shape of about 2" x 4", were carefully measured for length and breadth by means of a vernier caliper, and for thickness with a micrometer, care being taken to secure in each case the average for several measurements. The samples, numbered with a punch and washed in gasoline to remove grease, were then carefully weighed on a balance to the nearest 0.01 gram. Among the metals which may be used profitably are black iron, furniture steel, galvanized iron, copper, tinned copper, bright tin, tinplate, zinc, lead, stainless steel, monel metal, bronze, brass and aluminum.

A sample of each metal chosen for the experiment was carefully preserved in a hermetically sealed can containing a small amount of anhydrous calcium chloride at the bottom to eliminate moisture. These metal pieces were kept for purposes of comparison after the original samples had been treated.

A sample of each metal was fastened to a board and exposed to wind and weather on the roof. At weekly intervals these samples were examined and compared with those kept in the sealed can for the purpose of determining the degree of corrosion which had taken place. At the end of the time chosen for the experiment (in this case two months, but any longer or shorter period of time may

be chosen) the samples were carefully washed in cold, clean water and wiped dry with a soft cloth. The thickness was again measured and the increase or decrease noted. The samples were then weighed and the loss or gain per unit of surface calculated. The implications of such a test should be evident to the worker employing metals in structural and engineering work. Leading questions and other devices may then be used to carry over the importance of such an observation to trade practice.

Further Developments of the Project

The same procedure may be carried out with the limitations imposed by the intensity of the effect on the metal by burying a sample of each metal in moist earth, suspending it in a chimney over a coal fire, over an oil fire, and in a hot-air ventilating system. Another series of tests may be conducted in order to determine the effect of different corrosive liquids on metals. In some industries involving biological processes the presence of even minute particles of dissolved metal in substrata may be extremely detrimental. To illustrate the detection of minute particles of metals in liquids, samples may be submerged in 4 per cent acetic acid (the legal strength of vinegar) or in distilled vinegar for a certain length of time, the total volume of vinegar measured and a simple test made of the solution at intervals to determine the approximate quantitative value of the dissolved metal. For this purpose the colorimetric test has the advantage of being strikingly and directly applicable to situations where small quantities of metal are present. It is, moreover, easily managed by the student.

For all the details regarding colorimetric analysis the following books have proved useful: *Photometric Chemical Analysis*, v. I, by John H. Yoes, John Wiley and Sons, 1928; and *Colorimetric Analysis*, by F. D. Snell, D. Van Nostrand Company, New York City, 1921.

Similar corrosion tests may be conducted, using 2 per cent lye, 2 per cent soda solutions, dilute hydrochloric and sulphuric acids, sea water, aerated water, boiling and cold city waters, distilled water, lemon juice, and a host of other liquids.

A Twofold Problem

The problem of teaching science to boys in trade classes is really twofold and should receive a twofold solution. That part of related science which is an *integral* part of the job should certainly not be separated from it and be taught by some one who is neither a skilled tradesman nor a skilled trade-teacher. On the other hand, industrial and economic conditions are such today that the tradesman must know more than ever the properties and possibilities of the materials with which he works, and in order to obtain such knowledge he must be rendered aware of the fundamental properties of the materials of his trade and obtain some degree of skill in manipulating them in situations other than the one or two which happen to arise in his shop work. An introduction to the related science which is not an integral part of the job can be offered through giving the pupils an insight into scientific method as illustrated above. In this way seeds for later growth are sown in the apprentice years; even an elementary appreciation of scientific method on the part of the apprentice may yield abundant returns to the worker charged with the responsibility of choosing and maintaining the materials and equipment for his shop.

Believe It or Not in Vocational Education

By BENJAMIN E. MALLARY

Here we have improved on Mr. Ripley by giving you a three-to-one chance for disbelieving much that you hear about trade-extension training. Let us assume Messrs. A, B, C, and D "chewing the fat" between institute sessions. They have been handed ten questions relative to trade-extension instruction. Here are their answers. Check up on these fellows! Our answer is on page 92 of this issue, but let's have yours first.

1. What is a trade extension course?

- A—Any course in which tradesmen are enrolled.
- B—Any course with specific vocational objectives.
- C—A course, with specific vocational objectives, in which workers only are enrolled.
- D—A course organized to meet the training needs of a specific occupation, which enrolls only those engaged in the occupation.

2. What should be the length of such a course?

- A—It should be determined by the customary night-school organization, a semester or a year.
- B—The number of hours it takes to carry out the training objectives of a specific short learning unit of the occupation.
- C—As long as the students will attend.
- D—All trade courses given in a particular evening school should be of the same length so that all will start and stop at the same time.

3. Who should teach a trade extension course?

- A—The best qualified individual who can be secured from the occupation.
- B—The best teacher from the day school provided he doesn't teach more than two evenings a week.
- C—The best qualified individual who can be secured from the occupation, who has received special teacher training.
- D—The man or woman whom industry recommends.

4. How many should be enrolled in a trade extension class?

- A—As many as possible. A class with a large enrollment will help carry the cost burden of small classes.
- B—As many as possible providing each individual student gets something out of the course.
- C—Between 10 and 20 students.
- D—Depends on the type of course and methods of instruction.

5. Who should be enrolled in a particular trade extension course?

- A—Anyone over 18 years of age—our schools are free to all.
- B—Any individual employed in the occupation who has sufficient learning ability and whose employability will be increased as a result of taking the course.
- C—Any individual employed in the occupation who is intelligent enough to attain the learning objectives of the course.
- D—Any one who could get a job as a result of having taken the course.

6. *Who should set the standards for admission to trade extension classes?*
 - A—The State Department of Education.
 - B—Those who have the greatest interest in the matter, the local trade groups.
 - C—The State Department of Education and the local Board of Education.
 - D—An advisory committee representative of the local interests who set standards more precise and higher than the minimum established by the state and local boards of education.
7. *How should the admission standard be determined relative to "the ability of the student to learn"?*
 - A—By brief, easily administered objective tests. A special test for each course.
 - B—The night school principal or a special vocational counsellor can interview each applicant.
 - C—Each instructor can interview those who apply for his course.
 - D—Set an arbitrary standard for each course based on years' schooling; employment at the trade; or both.
8. *What should be the most important function of the individual who directs trade extension education?*
 - A—Interview prospective students, secure teachers, and places for them to teach.
 - B—Train his staff of instructors.
 - C—Secure as large an enrollment as possible.
 - D—Contact industry to determine its needs and secure its cooperation; select trained instructors; do more administration and less detailed work.
9. *What instructional methods should be used in a trade extension class?*
 - A—A method or methods adapted to the type of learner, instructional content, and individuality of the instructor.
 - B—Teaching methods are universally adaptable whether to day or to evening students, by academic or vocational teachers, or for any type of course content.
 - C—The lecture is the best method because it permits larger classes.
 - D—Individual instruction and the project method should be used because these are widely advocated by up-to-date educators.
10. *If you had to set up one standard only for measuring the efficiency of a trade extension teacher, what would it be?*
 - A—The breadth and thoroughness of his technical training and practical experience.
 - B—A high standing in his occupation.
 - C—The degree to which his instruction resulted in the increased employability of the students.
 - D—An ability to hold his students.

Efficiency

Wright, J. C., and Allen, C. R. *Efficiency in Vocational Education*. John Wiley and Sons.

This is the fourth in a series of books by these authors, known and recognized as leaders throughout the vocational-educational world. It is a companion book to a previous volume, "Efficiency in Education," by the same authors. The reason for this book, as stated by the authors in their preface is: "The program as it is now being developed has, at least in the opinion of the authors, reached a point where attention should be given not only to getting the

job done, but also to the problem of getting the job done with maximum efficiency." In this book the term "efficiency" is used in the usual sense of securing the maximum return for the time, energy, and money expended.

A rapid perusal of the book, or a detailed study of its voluminous chapters, justifies the statement appearing in An Appreciation, "The bringing together into one volume of the techniques and procedures which the authors have developed should be of inestimable value to the vocational teacher and administrator in checking up and determining the effectiveness of a program of vocational education."

This volume is not one to be read leisurely or particularly for recreation but for serious intention and profit. It is a volume that would be appreciated only by those who have rather an extensive knowledge and experience in the fields of vocational education covered by the authors.

The first chapter is a description of the procedures and measures used in the evaluating of the efficiency of vocational education. Analysis is there made of the different types and kinds of surveys and their relative merits in the judgment of the authors. This is followed by the authors' own system of determining efficiency and their method for evaluating it in terms of weighted values which are arrived at through conference and discussion of those whose judgment is deemed valuable. Numerous graphs and tables illustrate their method.

The authors attempt to follow scientific procedure and to select factors of efficiency on an objective basis, but the rating of these factors is relative and in terms of the judgment of the group responsible for rating the factors. The problem method used throughout the book in dealing with the factors to determine efficiency is commendable. It should be of much service to the supervisor, director, or other person responsible for the types of vocational education covered by the authors; and, if followed, would certainly increase his efficiency as a supervisor or administrator and train him in the proper way to proceed in up-grading his program. Six chapters of the book apply the method very fully to the various phases of vocational education.

This book could be used in courses designed to prepare leaders in vocational education. Each chapter ends with question cases and points for discussion that would be valuable to an instructor handling the book in extension classes. It would seem, if the book was intended for such uses, that a bibliography should have been appended to the volume.

Efficiency is a word that is much overworked in all fields of endeavor. Yet the movement of the day is to determine, if we can, better ways and means of measuring the effectiveness of a program in terms of the objective which has created the program. In working out schemes for doing this, efficiency may become a fetish and the elaborateness of the device defeat the ends for which it is created. To one not well experienced in the field of vocational education there is some danger of this kind in the present book. In view of the scientific set-up one might question a statement of this kind:

"In the experience of the authors indirect or subjective evidence is oftentimes more reliable, in the case of properly qualified survey agents, than is objective evidence. Of course, such a procedure puts the survey agent

(Concluded on page 92)

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NATIONAL COMMITTEE ON VOCATIONAL GUIDANCE

Professor Edwin A. Lee spent two days the last of February attending a meeting of the Committee on Vocational Guidance and Child Labor, of which Anne S. Davis of Chicago is chairman. This is a sub-committee of President Hoover's conference on Child Health and Protection. The committee meeting was held in conjunction with the annual meeting of the National Vocational Guidance Association in Atlantic City.

RECENT PUBLICATIONS ON CONTINUATION EDUCATION

The State Department of Education has recently issued a bulletin, No. G-4, entitled, "Handbook on Continuation Education." According to Superintendent Vierling Kersey, it is "designed to provide answers to questions from the schools concerning law, rights of children and child welfare." It is presented as the cooperative effort of many agencies interested in the welfare of employed minors.

The Division of Vocational Education of the University of California has just published a bulletin in its series on part-time education entitled, Pupils Who Leave School. This bulletin contains a detailed study of a group of pupils from a continuation school in the state compared with a group of high-school pupils of the same age. The general characteristics, school reactions, home conditions, and social and economic status of the two groups are compared and the resultant problems which confront the continuation school are pointed out. The study was made by Dr. Emily G. Palmer of the Research and Service Center.

AMERICAN VOCATIONAL ASSOCIATION MEMBERSHIPS

The membership of the American Vocational Association during the past five years has grown from 1222 in 1925 to over 8000 in 1930. In 1925 only eight states had state vocational associations. At the present time thirty-three states have such associations affiliated with the A.V.A., and four other states, namely Massachusetts, Nebraska, Montana, and Colorado, are now in the process of organizing state vocational associations to be affiliated with the national organization.

In addition to the regular memberships in the A.V.A., there is a special life membership. Life memberships at \$100 will create an endowment fund for the association. Enthusiasm for life memberships in the American Vocational Association is growing. Expressions of approval of this far-reaching step in the development of the association and its program are voiced by representatives from every section of the United States. The outlook is encouraging for a total of 1000 members, within a comparatively short time, in this highly valued class of membership. With an endowment fund of not less than \$100,000, the sum which 1000 life memberships will provide, the A.V.A. will be on a footing financially that will make possible a continuous, aggressive program of constructive activities.

Members of any section of the C.V.A. are already active members of the A.V.A. Any individual is, however, invited to become a life member, or any school or organization may raise the funds for a life membership for any individual whom they wish to honor.

OBJECTIVE TESTS

A short syllabus on the use of objective tests and measurements in industrial education has been prepared by Benjamin E. Mallary, Division of Vocational Education, University of California. This syllabus will be sent on request to any one writing to Mr. Mallary, 121 Haviland Hall, or to the Research and Service Center, 118 Haviland Hall, Berkeley.



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Executive Council Meeting, C. V. A.

The executive council of the California Vocational Association met at the Hotel Californian in Fresno at 9 o'clock, November 9. Because he was leaving the teaching profession, D. M. Rutherford offered his resignation as secretary-treasurer of the California Vocational Association. President Patchett announced that he had appointed W. H. Van Dyke to the office of secretary-treasurer until election at the next annual meeting.

Reports from the presidents, or their representatives, of the various regions were given: R. E. Gilbert, Bay section; F. C. Weber, Southern section; T. M. Tetstall, San Joaquin Valley section; H. T. Ashford, Sacramento Valley section; and C. E. Knott, South Coast section.

Several matters were decided upon by regular vote:

Beginning with May 1, 1929, all dues paid will carry over until a year from the month paid.

Notices of regional meetings or notices of state-wide interest should be sent to the State Department of Education, to the Sierra Educational News, and to the Vocational Education News Notes. It was suggested that the president of each organization or section send in a report of meetings or programs to the editor or president of the C.V.A. and he, in turn, should send them to the various magazines or publications.

The publicity and news work were divided between the second vice-president and editor, and it was decided that the second vice-president, Henry Batchelder, Point Loma High School, San Diego, should be responsible for advertising, his duties to include the advertising of the annual meeting and general advertising of the organization exhibits. It was decided that the duty of the editor was to have published all articles and news items that he received. The editor is C. P. Benz, Frick Junior High School, Oakland.

August 1 and 2 were the dates decided upon for the next annual meeting in San Jose.

W. C. Patchett, president of the C.V.A., was made the official delegate to the December, 1929 meeting of the A.V.A. in New Orleans.

A number of suggestions received favorable comment, but required no official action:

The secretary will send out a monthly report blank to local organizations.

An effort will be made to sell advertising space at the next annual meeting.

The nominating committee is requested to make its report public long enough before the annual meeting so that members may become acquainted with the candidates.

It was suggested that a section for attendance officers be included in our annual meeting in charge of Mrs. Lillian B. Hill, chief of Bureau of Attendance and Migratory Schools, State Department of Education.

Suggestions for speakers at the annual meeting will be welcomed by the secretary of the C.V.A., W. H. Van Dyke, Petaluma High School.

R. E. Gilbert, chairman of the committee on revision, was called upon to report. Charts were presented showing the proposed plan of tying all professional organizations, local and state, into the national organizations so that the total dues, paid to the local organization, would automatically bring membership in the C.V.A., the C.T.A., the A.V.A., and the N.E.A. Each group would keep its own identity, and the C.V.A. council would be made up of presidents of the various groups with the state elected officers mainly for the purpose of proposed legislation, institute programs, and the usual business of the state organization. The committee was authorized to continue its work and report back to the council as soon as possible.

There was a great deal of discussion about the proposed plan. Many motions were made but were not seconded or were withdrawn. Every phase was discussed thoroughly and many good suggestions were added. It was finally moved and seconded that we accept the proposed plan in general and that it be referred back to the committee. The committee was authorized first to get our state organization perfected and then we could work toward national improvement. It was moved that the committee complete its work as soon as possible and mail out a copy of the report to each member of the council. These reports were to be reviewed and checked closely so they could be discussed intelligently at the executive meeting which is to be held a day or two prior to the annual state meeting next summer. It was suggested that the president and executive secretary of the C.T.A. be invited to be present at the discussion of this subject the second day of the annual meeting at San Jose.

C.V.A. ITEMS

Bay Section, C.V.A., at Vallejo

The Bay section, C.V.A., held a joint session with the North Bay Vocational Teachers' Association on Saturday, March first, in Vallejo. Over one hundred men vocational teachers, supervisors, and directors sat down to luncheon and were later addressed by Captain Fisher, U.S.N., industrial manager of Mare Island Navy Yard. This address was so well received that resolutions were passed to have the talk printed and distributed. In an adjoining room approximately sixty women were addressed by Leslie P. Smith of Oakland.

Members of the group had come from as far south as Modesto, as far north as Roseville, as far east as Placerville, and from Tomales on the west. In the afternoon the men visited the Navy Yard and the women were entertained by a trip to the home of Jack London in the Valley of the Moon. An hour and a quarter of the late afternoon was devoted to four conferences conducted by L. B. Travers, Will Matthews, B. E. Mallary, and A. R. Nichols. The association was honored with the presence of Walter C. Patchett, president of the California Vocational Association.

The beautiful Casa de Vallejo Hotel was turned over to the association in the evening for a banquet and dance.

Over one hundred and thirty remained for the evening activities and enjoyed the cleverness of the toastmaster, Richard Werner of San Jose Teachers' College. Special musical numbers provided entertainment during the banquet. The address of the evening was delivered by Dr. E. J. Brown, lecturer in business administration at the University of California, who spoke on "Industrial Progress and the Wage Earner." Dr. Brown emphasized the existence of economic, and particularly industrial, change. He raised several vital problems relative to the effect of this change upon the future of vocational education, and dwelt somewhat in detail upon the birth and death of vocations and the difficulty of foretelling their future.

The meeting for the spring quarter will be held in Stockton on May 17, when the Valley section will be hosts to the Bay section. The success of this meeting led many present to urge a large attendance in Stockton. It was suggested that the members take a large block of reservations on the night boat from San Francisco to Stockton on May 16.—B. E. MALLARY.

New Plan Endorsed

The Southern section, C.V.A., met on December 7 in Los Angeles. F. C. Weber reported the tentative plan of revision of the C.V.A. as outlined at Fresno and it was heartily endorsed by that section.

New Officers in Los Angeles

The Los Angeles Vocational Association elected officers for 1930 as follows:

President—Park S. Hyde, Stevenson Junior High School.
Vice-President—Drew C. Amo, Venice High School.
Secretary-Treasurer—Effie J. Hayden, Polytechnic Special Day and Evening High School.

San Francisco Extends Invitation

The San Francisco Vocational Association meets on the fourth Monday of every calendar month at 4 P.M. in the High School of Commerce, Room 123. The association extends a cordial invitation to any teacher in the state to attend any of these meetings should he be visiting in the city. The officers of the association are:

President—Charles E. Barker. Secretary—Richard J. Ryall.
Vice-President—George Yager. Treasurer—Martin Mitchell.

North Bay Association Active

The North Bay Vocational Association is continuing its monthly meetings this year, the first being held in Vallejo in October. A trip through the Navy Yard, with an inspection of the new submarine V-6 and of the cruiser "Chicago" was made by the men who attended. The officers elected at this meeting were: President, George Streiff, Sonoma; Vice-President, F. McLafferty, Richmond; and Secretary-Treasurer, W. R. Garcelon, Vallejo.

The November meeting was held in Sonoma, and due to its attractions the industrial aspects were forgotten to enjoy the historic and scenic features.

On Saturday, March first, the Bay Section, C.V.A., and the North Bay Vocational Association held a joint meeting at Vallejo. A visit to the Navy Yard was a feature of the occasion.—W. R. GARCELON, Secretary.

Plans for Convention Program

The program committee for the C.V.A. convention at San Jose is planning for section meetings on Friday morning, August 1, and Saturday from 9:00 to 10:30 A.M. and 2 to 3:30 P.M. The general meeting and banquet will be on Friday afternoon and evening, respectively.

Continuation Education Associations Meet

Southern Section

In the new building which has just been erected in San Diego for the Continuation High School, the Continuation Education Association of Southern California will meet on Saturday, April 5. A morning session, with a discussion of the new Continuation Education Act, as it affects the pupil-teacher relationship, a luncheon at which Superintendent Hepner will speak, and an opportunity to see the new building are all scheduled on the tentative program.

San Diego is the fourth city in the state to erect a new building expressly to house the activities of the continuation school. Their building, costing about \$50,000, will be ready for occupancy about March 1. It is located on Twelfth and Russ streets.

Northern Section

The Continuation Education Association of Northern California met for a luncheon and institute program on December 17 at the Athens Athletic Club in Oakland. Over 100 members were present, including teachers from Oakland, San Francisco, Berkeley, Pittsburg, San Jose, and Martinez. The teachers were greeted by the chairman, Mrs. Margaret Lomax, director continuation education, San Jose, and also by L. B. Travers, director of adult and continuation education, Oakland.

Pupil Adjustment and the Classroom Teacher was the topic of an address by Dr. Philip W. L. Cox, professor of secondary education, New York University. At the business meeting which followed, a committee consisting of John E. Carpenter, chairman, Carl E. Bash, and Miss Edith E. Roche, was appointed to discuss the question of affiliation with the Continuation Teachers' Association of Southern California. A committee consisting of Harry G. Hansell, chairman, Mrs. Hilda Porter, Miss Ethel Brown, and Mack Stoker, of Oakland, was appointed to make plans for an exhibit to be sent to the Sacramento State Fair in August.

Report of Committee on Affiliation

There are two associations of continuation school teachers in the state; one is in the Bay section, with Mrs. Margaret Lomax as president of the association. She appointed the following committee to confer upon affiliation: John E. Carpenter, principal, Sacramento Continuation High School; Carl E. Bash, vice principal, San Francisco Continuation High School, and Miss Edith Roche, Merritt High School, Oakland. The other association is the Southern California Continuation School Teachers' Association, of which C. V. Denman, director of continuation education, Santa Barbara, is president.

Committees from both associations met at Fresno on January 11 for a short conference. J. E. Carpenter, C. E. Bash, A. E. Paine, and F. C. Weber were the representatives who made recommendations to their respective associations for adoption. The plans include delegates to the C.V.A. meetings and to the semi-annual meetings of the northern and southern associations to make cooperative effort possible.

The New Trend in the Teaching of Skill Subjects*

By ESTA ROSS STUART, Berkeley High School

Administrators, supervisors, and teachers all over this country are sensing the need for standardization in the teaching and testing of skill subjects. All agree that the subject of typewriting should be given first consideration. A state committee has been appointed with Miss Eva Jessup as chairman for Southern California, and Mrs. Esta Ross Stuart as chairman for Northern California. The chairmen have been chosen by Dr. Ira W. Kibby, chief, Bureau of Business Education, to organize the committees and to lead the study. The chairmen are only your reflectors; our accomplishment depends entirely on your cooperation. There is nothing we covet so much as your confidence and your cooperation. It is our desire that every typing teacher in the state shall feel that this is his committee; that its purpose is to assist him in any way possible; to inspire him; to lighten his teaching load by organization inside and outside of the classroom; to provide him with state norms for the evaluation of accomplishment; to supply reliable data to take the place of the various opinions on which he has had to rely; and to serve as a clearing-house for the entire state in order that it may lead in standardization and classroom efficiency.

Classrooms as laboratories.—The classrooms where skill subjects are taught should be conducted as laboratories where we not only attempt to teach a skill, but where we also study aptitudes, and attitudes; knowledges and skills; and where we try to measure everything we teach.

Measurement of skill.—Everything that can be taught can be measured. It is just as possible to provide an accurate measure of a skill as it is to give accurate instruction in it. Little progress has been made in separating and measuring skills because we have just begun to study them with this object in view. If teachers will apply these measures as rapidly as those who are engaged in research study can provide them, it will revolutionize our teaching and eliminate many hours of wasted time in the classroom.

Typing a combination of the mechanical and the intellectual.—There are two primary things to work for in teaching a skill subject—*technique* and *control*. While both are always present in the performance of the operator, the teacher must keep them separated in her mind for purposes of instruction. "*Technique* is the set of habits that constitutes the mechanical part of typewriting, the automatic performance of letter strokes, singly and in their sequences, of copy getting, of manipulation of the machine. It begins as a highly conscious process, and finally becomes completely automatic. *Control* consists in the voluntary guidance of the performance, and involves an attitude of mind characterized by calmness, confidence, a realization of competence, and will-to-rapid-accurate performance." *Mastery in this skill is due not so much to the text used, the method employed, or the equipment, as to the way the pupil engages in the activity under the guidance of the teacher.*

Skill has three outstanding characteristics—speed, accuracy, and fluency. To obtain any one at the expense of either of the others is shortsighted. The business world demands all three.

The Course by Semesters

The first semester.—A semester is to be interpreted as twenty weeks of work with forty minutes of recitation daily. Let us omit the position at the machine, parts of the machine and such details which everyone agrees the operator must learn. What things can we teach so well that they can be performed automatically at the end of this semester? Everyone will agree that the student should acquire an automatic stroking rate by the end of the first semester. He ought to know how to center a word, a line, or a group of words, at least. He should know how to write correctly on a line, how to insert letters which have been omitted; in fact, the process of aligning should have become automatic. He should be able to follow oral instructions that are clearly given without having them repeated. He should be tested against time in each of these skills.

Grading.—The question of grading is constantly arising wherever teachers gather for conferences. Since we concentrate on *technique* and *control*—not on copy—in the first semester, the instruction can take on the atmosphere of a game where technique and control precede perfect accomplishment. It is suggested that we watch the results and when 75 per cent of the class are producing work that will earn a grade according to the grading scales you have provided in your school begin to record the grades. There is a great difference in classes even in the same school. This time will vary from one to four weeks. There should be no problems of set-up in this semester with the exception of simple centering.

Reasonable requirements in speed.—In all schools where the enrollment is sufficiently large, it will be found advantageous to run the classes in three sections. A high section for the students who can be pushed ahead, a regular section for the average students, and a low section for the students who will need special help and more repetition. The rates which I am giving you are what we call "consistent rates." By consistent, we mean that out of every five tests that the student takes on new matter, he can be expected to pass three of them. The semester requirement for section one is 25 words and up; section two, 20 words; and section three, 15 words. There is not space to give here the grading scale for speed in each semester, but the accuracy scale which is the same for all semesters is given:

	In 5-minute tests	In 10-minute tests	In 15-minute tests
Perfect	100	100	100
1 error	90	95	96
2 errors	80	90	92
3 errors	70—passing	85	88
4 errors	60	80	84
5 errors	50	70	80
6 errors	---	---	76
7 errors	---	---	70

* Excerpts from a speech given at the Los Angeles City Teachers' Institute, Stenographic Teachers' Section, Dec. 16, 1929.

Second semester.—Straight copy is still emphasized during the second semester. It seems advisable to teach the simplest forms in letter writing because in many schools as high as 50 per cent of the students drop typing at the end of the first year. Teach letter writing with definiteness. It takes about three days for a student to master a letter form if it is correctly taught, and definite rules are given for the set-up. Here are two simple rules, one for the address—*not the date*—and one for the length of line. Both rules are for single-spaced letters.

The address.—For every letter up to 50 words in length, start the address on the twenty-fifth line from the top of the letterhead and raise the address one line for every additional 25 words.

The length of line.—For all letters up to 100 words in length, use a four-inch line. Increase the length of line one inch for each additional 100 words.

Whatever skills you plan to teach in a semester, rotate them in order that the operator may not lose any skill which he has once developed. This is particularly true of figures. A satisfactory rotation for the second semester after letters have been taught is:

Monday—letters
 Tuesday—letters
 Wednesday—figures
 Thursday—fifteen-minute test
 Friday—alignment

A battery of timed tests on each skill should be given in this semester. Rate requirements for this semester should be: section one, 35 words and up; section two, 30–34 words; and section three, 25–29 words. The same accuracy requirements should be met as in the first semester.

Third semester.—In the third semester there should be intensive drill on tabulation and rough draft in addition to the skills learned in the first year. The work in tabulation can be speeded up by giving timed figuring drills with no work at the machine. When the process of figuring has reached a satisfactory speed, let the students finish the exercise at the machine. Rough drafts should be taught in the same way. No student should be permitted to write haltingly at any time. He should read many rough drafts before he begins to write from rough draft copy. This is what I mean by separating your skills and teaching them separately before you combine them. When you begin teaching rough drafts or tabulating you are not concentrating on the performance at the machine. The new things to be learned are reading a new kind of copy or figuring the set-up of columns and column heads. A satisfactory weekly rotation for this semester is:

Monday—letters
 Tuesday—tabulation
 Wednesday—rough drafts
 Thursday—fifteen minute test
 Friday—correction and alignment

Students should pass timed tests in each of these skills and write the fifteen-minute tests with the following consistent rates: section one, 40 words and up; section two, 35–39 words; section three, 30–34 words.

Fourth semester.—The same rotation as in the third semester may be retained in the fourth. The most satisfactory plan for this semester provides actual forms for the student to use. No school using actual forms in this semester would voluntarily return to the old plan. There

should be no section three in this semester. Students in section one should write 45 words and up; and in section two, 40–44 words. Teachers who think this rate is too low must remember that it is the student's real, consistent, producing rate, not his highest, occasional rate.

The timed tests of the fourth semester, with the exception of the fifteen-minute test on straight copy, should contain the corrections necessary to make it of commercial value. This means that it would be acceptable to the manager of any office in which this student hopes to find employment. Too often, as teachers of skill subjects, we forget that we are *training operators for a job*, not producing beautiful copies for an attractive file-case in a modern schoolroom. Since everyone, however skillful, must sometimes make errors, he should also know how to make neat corrections. The fourth semester is the time to test him in neatness.

Beginning the New Method

If one wishes to start this new method of teaching, the first suggestion is do not try to follow some one else exactly. Study your own situation and make a proper application of whatever information you have been able to gather. Tabulate the knowledges and skills you are sure you have taught, this semester. Do not include any that you *wish* you had taught or that you have not tried to master. Devise a simple test for each. Give it against time. Arrange your scores from the highest to the lowest—that is, the accomplishment scores. Arrange your time scores from the lowest to the highest. Find the class median, and set out to raise that median, by competing with yourself. Later you can start in competition with some one else. If you start with a low median do not worry about it, and do not give too much heed to what some one *tells* you he is doing. We sometimes are inclined to state what we wish we were doing for the actual accomplishment. Raising a class median is a real accomplishment, not to be compared with the work of individual students who may make remarkable records in the classrooms or in contests.

Summary

A list of the outstanding characteristics of the new trend in teaching is as follows:

1. Separating knowledges and skills in order to:
 - a. Concentrate on one at a time in the learning process.
 - b. Test each in order to establish time and accomplishment norms.
2. Definite measuring of accomplishment. There are very few good tests on the market. You can devise simple ones for your own use in addition to these. Definite measuring of accomplishment is one of the things that will revolutionize the teaching process. Skilled teachers are coming into their own. Academic cast-offs can no longer be assigned to the work.
3. Training is concentrating on rapid-accurate recall and control—not only on accomplishment, but on *accomplishment in minimum time. Speed, accuracy and fluency.*
4. Discontinuing of arbitrary standards which have no scientific foundation. Students will be rated first from medians and later from well-established norms.
5. Teaching skills in a definite rotation. It brings optimum speed, optimum accuracy, and optimum fluency.

6. Giving timed tests in each skill regularly to improve it, to speed it up, and to accustom the student to work against time.
7. Requiring all typing rooms to be supervised, at least during the first year.
8. Organizing every classroom from the beginning into a business concern. Teaching the student how to meet people, how to enter a private office, and how to be courteous to employees. All these should be practiced daily during the two years of training.
9. Establishing of state and national norms in time and accomplishment.
10. Devising a definite testing program. It is possible for the State of California to lead in this standardization. What part are you as an individual teacher willing to play in such a program?

Commercial News Items

Teachers' Institutes

The commercial section of the Santa Clara County Institute held two sessions on December 17 and 18. Dr. Ira W. Kibby, chief, Bureau of Business Education, State Department of Education, was the principal speaker at the first session, and gave a resumé of the plans of the Bureau of Business Education for the coming year and discussed some of the outstanding trends in business education in the state.

Mrs. Esta R. Stuart of the Berkeley High School spoke on the teaching of typewriting at the session held on December 17. Mrs. Stuart is chairman of the Northern Section of the typewriting committee which has been appointed to make a state-wide study of typewriting. F. H. Glasson, head of the commercial department of the San Jose High School, acted as chairman of the commercial section of the institute. Both sessions were well attended.

The commercial section of the Central Coast Section of the California Teachers' Association held its annual meeting in connection with the institute of the California Teachers' Association, Central Coast Section, at Monterey, December 17, 18, and 19. The commercial section was organized as a conference with a leader for each day. Mrs. Esta R. Stuart of the Berkeley High School led the conference on December 17; Dr. Ira W. Kibby led the conference on December 18; and G. O. Munson, head of the commercial department of the Watsonville Union High School, and W. E. Alderman, head of the commercial department of the San Luis Obispo High School, acted as conference leaders on December 19. Each member of the group had an opportunity to contribute to the conference. This method proved very satisfactory as the teachers discussed the topics on which they desired information.

The Southern California Commercial Teachers' Association held its winter meeting on December 19. Honorable Alexander R. Heron, director of the Department of Finance, State of California, delivered an inspiring address on business education. John R. Baker of the Glendale High School was elected president of the association for the coming year.

At the meeting of the Los Angeles City Commercial Teachers' Association, held on December 17, the follow-

ing officers for 1930 were elected: Harold E. Ives, Polytechnic High School, president; D. W. Adamson, Garfield High School, vice-president; and John N. Given, Washington High School, treasurer. The secretary is to be appointed by the new president.

The winter meeting of the commercial teachers of the Central Section of the California Teachers' Association was held at Visalia on January 18. Dr. Ira W. Kibby addressed the meeting on the plans of the Bureau of Business Education for the coming year. Lloyd Jones, former secretary to the Commissioner of Education of Cleveland, Ohio, addressed the meeting on the trends in business education as presented at the International Conference on Business Education held at Amsterdam last July. Mr. Jones was one of the representatives chosen by the United States to attend this conference.

Committees on Business Education

The California Commercial Teachers' Associations have appointed committees, to work in cooperation with the Bureau of Business Education, to make studies of typewriting, penmanship, and salesmanship. The committees are divided into two sections: one in the northern and the other in the southern part of the state. These committees are coordinated by the Chief of the Bureau of Business Education.

Mrs. Esta R. Stuart of the Berkeley High School is chairman of the northern section of the typewriting committee, and Miss Eva Jessup, assistant supervisor of commercial education, Los Angeles city schools, is chairman of the southern section of the typewriting committee. Miss Gladys M. Smith of the Berkeley High School is chairman of the northern section of the salesmanship committee; and Miss Monette O. Todd, supervisor of salesmanship, Los Angeles city schools, is chairman of the southern section of the salesmanship committee. W. E. Clayton of the Technical High School, Oakland, is chairman of the penmanship committee. The committees have had several meetings and are making splendid progress.

The follow-up committee which was appointed last year by the commercial teachers to make a study of follow-up, is making excellent progress and hopes to have a report before the end of the school year. Miss Muriel Ogden of the Richmond Union High School is chairman of the northern section of this committee, and L. O. Culp of the Fullerton Union High School is chairman of the southern section of the committee.—I. W. KIBBY.

CONFERENCE OF SOCIAL WORK TO BE IN BOSTON

The fifty-seventh annual meeting of the National Conference of Social Work and Associate Groups will take place in Boston, June 6 to 14. More than forty groups in various fields of social work will meet at that time. The conference will be formally opened on the evening of June 8 by a presidential address given by Dr. Miriam Van Waters, referee of the Los Angeles Juvenile Court.

Attendance at the conference is open to anyone who wishes to come. Headquarters will be at the Statler Hotel. Special rates will be offered conference members for round-trip tickets. Requests for further information may be sent to Howard R. Knight, general secretary, National Conference of Social Work, 277 East Long Street, Columbus, Ohio.

Social Agencies and the Continuation School

By SARAH B. CROSBY

Coordinator, San Diego Continuation High School

The social agencies of San Diego, indicating a newer trend in social work, have recently organized their activities in terms of *function* rather than on the old basis of the source of their funds and the names of the agencies. A community-wide council has been formed; its membership consists of one representative from each social agency in the city and, in addition, several members at large. This community council has organized into functional committees or sub-councils in such fields as "health," "family welfare," "child welfare," and each of these special groups is made up of representatives of the various agencies which are specifically concerned with the special group problem.

Sub-Committee Considers Child Welfare

The committee on "child welfare" is primarily a public-school group. It is through this group that the continuation school maintains its relationships with the various social-service agencies of the city, and the public-school system is articulated with all agencies dealing with child welfare. Dr. Charles R. Tupper, director of curriculum and research and assistant superintendent of schools, is chairman of this group, and its membership consists of the following: the judge of the juvenile court, the chief probation officer, the chairman of the committee of social workers dealing with dependent children, the head of the city playgrounds, the head of the psychology department of the State Teachers' College, a representative from the parent-teachers' association, a psychiatrist, a representative from the city and county health departments, the superintendent of schools, the supervisor of attendance, the supervisor of visiting teaching, the head of the school health department, the director of the senior high-school counseling staff, the supervisor of tests and measurements, and the coordinator from the continuation school.

The aim of this sub-council, or committee, on child welfare is to develop policies concerning local problems of child welfare. The committee offers a common meeting ground for checking up on objectives and the actual scope of the work of each agency represented on the committee.

In this committee, by discussing objectives and the general scope of their work, agencies can prevent overlapping and fill in conspicuous gaps in their respective fields of social work. The committee on child welfare is thus a conference group organized for the purpose of contact, and not an administrative or legislative body.

Committee Aids Continuation Education

Through membership in this group the continuation school will be able to make its program of education more effective. Much interchange of information has already been arranged. The Social Service Exchange has been made available for acquiring data concerning many doubtful exemption cases from schools. Various social agencies have on file important data concerning the financial status of families asking for the exemption of a child on the grounds of economic necessity. The probation office has offered the use of its files as well as excellent coopera-

tion on individual cases; and other local agencies interested in child welfare have shown themselves interested in continuation-school students.

Until now, however, this interest has lost much of its possible effectiveness because of the lack of any definite organization back of the interest. This new group provides that much-needed organization which gives an opportunity for each agency in the group to make clear its major function.

Committee Cooperates on Problems

Vocational guidance is "undoubtedly the most important single function of the continuation-education program," says the recently issued Handbook on Continuation Education. "Closely related to the need for vocational guidance is that for social and civic guidance." Under the head of vocational guidance, the continuation school includes a program of guidance, placement, and follow-up, a program which "becomes, when rightly conceived, a follow-up of all students who leave the schools before high-school graduation." Concerning this program and its background, the Handbook continues: "Because educators came to realize that, however well-grounded in the tools of learning, pupils leaving school with less than high-school graduation might be, they were nevertheless woefully lacking in ability intelligently to choose and successfully to enter their early occupations, this program has been made available. They have come to realize that the great majority of minors take the first job that offers, stumble from one to another by chance, are willing to be employed at 'anything' that pays wages, and have little, if any, specific training for any job open to a minor, and the benefit of almost no intelligent vocational guidance from the full-time school, the home, or other agency. Largely from these realizations, the continuation-education program has been developed." This, together with the necessary supplementary social and civic guidance is, briefly, the scope of the work of the continuation school.

As an agency definitely covering the more or less specialized field of vocational guidance, the continuation school can hope for some very real assistance through contact with a group organized to consider child welfare as a community-wide problem. One of the specific hopes of the continuation school is for a community recreational program for adolescent boys and girls. Anyone who has worked with continuation-school students realizes the barrenness of the recreational life of these students in an appalling number of cases. The case histories of continuation-school students who have been brought to the attention of social agencies because of anti-social behavior, reveal the fact that all too frequently their behavior has been a substitute for wholesome recreation. A well-organized recreational program, provided by the community for its adolescent boys and girls would meet a very real need in the lives of many continuation-school students.

* California State Department of Education. Handbook on Continuation Education. Bulletin No. G-4, 1930, p. 15.

Another problem of the continuation school is in the field of health work. A community health program, including (1) health centers providing for pre-natal care, and the care of pre-school children, and (2) the services of a dentist would meet definite needs in the continuation school. A third need, which is also distinctly a community-wide need, is for a child-guidance clinic. As a conference group dealing with the problem of child welfare from a community-wide angle this committee is a logical group to consider this problem. It is generally recognized that many continuation-school pupils are boys and girls with problems that require the aid of an expert for their possible solution. The service of a psychiatrist is a keenly felt need in the San Diego Continuation School.

These are some of the outstanding needs which we hope will be met through the help of the community council. The continuation school also has obligations—through its own particular function of vocational guidance and placement—to the other agencies working in the field of child welfare. Through the work of this committee the continuation school hopes to define more clearly the scope of these obligations.

The Road to Advancement

The articulation of the various parts of the school system so that a pupil passes readily from the elementary school to the junior high school, or the junior high school to the senior high school has been a recent movement in all progressive school systems. High-school visiting day has been one of the methods of accomplishing this articulation between the junior and senior high schools. It has occurred to some educators that the gap should be bridged between the continuation school and the night school if continuation education is really to be the "first rung on the ladder of adult education."

The Sacramento Continuation High School has endeavored to accomplish this articulation by sending letters to employers suggesting that they encourage their employees who have just completed their work at the continuation school to enter the night school classes. A copy of the form letter which is sent to the employer is given below:

"For your information, this is to call your attention to the fact that your employee, _____, has now become 18 years old and is no longer required to attend classes at this school.

"In case you find it convenient to provide for it, we should, of course, be pleased to arrange for the continuance of his attendance. If this is not convenient, may we suggest that a word of encouragement from you regarding attendance at classes at the Evening High School may accrue to great benefit to both your employee and yourself.

"I wish to take this opportunity to express our appreciation of your fine cooperation during the time while this student attended classes here."

The pupil, on the other hand, is also encouraged to attend classes, and a letter is sent to him, calling his attention to the opportunities which are open to him. A copy of this letter follows:

"I am writing this letter on the occasion of your having become 18 years old. As you know, you will no longer be required to attend this or any other school. From now on any education or training which you obtain will be due to your own voluntary action.

"As a personal friend, may I not urge you to go on with your studying, no matter how far you may have gone up to the present time. More and more people are realizing that they should continue to study practically all their lives if they wish to advance their own interests by becoming both more intelligent and more successful in whatever they do.

"If you can not arrange to attend this or some other day school, let me urge you to attend classes at Evening High School, or in some way to arrange to continue your studies. Time which you devote to this purpose during your early years will repay you many fold in happiness and success through all the rest of your life."

These two letters are having satisfactory results, according to the principal, John E. Carpenter, and sometimes the reaction of the employer is to allow his employees over 18 years of age to remain in continuation-school classes. Such is the reaction of one employer whose letter is quoted below:

"I have received your letter stating that _____ was no longer required to attend classes. I have had a talk with the young man, and as he seems filled with ambition, I am going to allow him to continue four afternoons a week, as at present."

Conference on Continuation Education

City and county superintendents of schools, city and county supervisors of attendance, probation officers, and directors and teachers in continuation schools to the number of over one hundred and twenty-five responded to the call of Vierling Kersey, state superintendent of public instruction, to attend a conference on continuation education held in Fresno on Saturday, January 11.

Dr. Nicholas Ricciardi, chief of the Division of City Secondary Schools, State Department of Education, presided at the morning session and introduced John E. Carpenter, chairman of the State Committee on Continuation Education, who reported on the work of the committee since the first Fresno conference of 1927. The work of regional sub-committees, studying the problem of part-time or continuation education; the activities of the central committee in uniting these efforts into a combined report; the framing of a new continuation-education law; the preparing of the rules and regulations for passage by the State Board of Education; and the final collection of material for the Handbook on Continuation Education were reviewed.

Dr. Emily G. Palmer, special agent for training continuation-school teachers, University of California, spoke on "National Issues in Continuation Education." Pointing out that the pioneer days of mere struggle for existence were now about over in continuation education, Miss Palmer expressed the belief that we were entering a period of development of the arts of part-time education. The national issue of fundamental importance just now, according to Miss Palmer, was said to be proper instruction for continuation-school pupils, and for this reason proposed that the organization adopt as a part of its next year's program the development of lesson sheets.

A luncheon meeting was held at Hotel Fresno, with Superintendent O. S. Hubbard of Fresno presiding. Superintendent Kersey then spoke on secondary education from a state-wide point of view. He pointed out that social adjustment was more and more the measure of

success in life and therefore we should revise our objectives in secondary education to include the "living arts."

Dr. Edwin A. Lee, director, Division of Vocational Education, University of California, traced three periods of education from formal discipline to the test and measurement period and now, to a new period which we are just entering, of personnel and adjustment. Part-time education, according to Dr. Lee, is one phase of the new period and has been the great experiment in education, laying a foundation upon which all the schools can build.

F. C. Weber of the Los Angeles Continuation High School, the last speaker, brought up two types of questions which arise in reference to continuation education: internal problems—for example, the type of classroom work for the three-hour-a-day pupils; and external problems—for example, the interchange of pupils between districts. A third issue was one of affiliation among continuation school teachers of the north and south that they may work in cooperation on common problems of research.

Dr. Ricciardi brought the meeting to a close, recommending the appointment of two committees to study the chief problems brought out by Mr. Weber—namely, unemployed minors, and affiliation.

EFFICIENCY

(Continued from page 83)

in the position of expressing an opinion which he can not always verify from statistics. Statistics, however, are chiefly regarded as valuable as affording protection to an individual rather than as representing the most reliable evidence.

"The authors believe that with experienced individuals the 'hunch' is a legitimate factor in survey work in vocational education."

The reviewer has believed heretofore that scientific methods and procedure were to do away, as far as possible, with the dangers of the "hunch" and the "guess" method on the part of the so-called expert.

This volume is a worthy contribution to the growing importance of vocational education.—B. W. JOHNSON.

BOOKS RECEIVED

- BROWNJOHN, W. E. *Elementary free-hand drawing*. Price, \$0.68; JAMES, H. F. *Junior color tablet*. Price, \$0.35. Bruce Publishing Company, 1929.
- HENNIG, W. E. *How to wind direct-current armatures*. Bruce Publishing Company, 1929. Price, \$3.00.
- LANE, MAY ROGERS. *Vocations in industry*. Volumes I, II. International Textbook Company, 1929.
- LOOMIS, R. A. *Printshop practice*. Bruce Publishing Company, 1929. Price, \$1.20.
- MICHELSON, H. W., and BUCK, R. O. *Sketching for the draftsman*. Bruce Publishing Company, 1929. Price, \$0.80.
- NEWKIRK, L. V., and STODDARD, G. D. *The general shop*. Manual Arts Press, 1929. Price, \$2.00.
- PETERSON, L. C. *101 metalworking projects*. Bruce Publishing Company, 1929. Price, \$2.00.
- RODGERS, R. H., and BELMAN, H. S. *My vocational guide-book*. Bruce Publishing Company, 1930. Price, \$0.20.

BELIEVE IT OR NOT IN VOCATIONAL EDUCATION

Key to answers to questions on page 82.

- | | | | | |
|------|------|------|------|-------|
| 1. D | 3. C | 5. B | 7. A | 9. A |
| 2. B | 4. D | 6. D | 8. D | 10. C |

COMING EVENTS

- Southern California Continuation Education Association, Saturday, April 5, San Diego.
- Central and Bay sections, C.V.A., May 17, Stockton.
- Northern California Continuation Education Association, June 7, San Jose.
- Annual meeting, C.V.A., August 1-2, San Jose.
- Annual convention, A.V.A., December 10-13, Milwaukee, Wisconsin.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. *Coordination in Part-time Education*. March, 1921.
- No. 5. Bulletin No. 4. *An Analysis of the Work of Juniors in Banks*. May, 1921.
- No. 6. Bulletin No. 5. *An Analysis of Clerical Positions for Juniors in Railway Transportation*. August, 1921.
- No. 7. Leaflet No. 3. *Selected Reading List for Administrators and Teachers in Part-time Schools*. September, 1921.
- No. 8. Bulletin No. 6. *Part-time and Continuation Schools Abroad—Reprints*. November, 1921.
- No. 10. Leaflet No. 4. *Recreational Reading for Part-time and Continuation Schools*. March, 1922.
- No. 13. Bulletin No. 14. *The Administration of the Part-time School in the Small Community*. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. *The Part-time School and the Problem Child: An Investment in Social Insurance*. April, 1926.
- No. 15. Leaflet No. 6. *A Digest of Laws for Working Boys and Girls*. June, 1927.
- No. 16. Bulletin No. 24. *Pupils Who Leave School*. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. *Analysis of the Cabinetmaker's Trade*. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. *The Problem of Apprenticeship in the Six Basic Building Trades*. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. *An Analytical Study of the Duties of the Chemical Laboratory Technician*. June, 1927.
- No. 7. Bulletin No. 22. *Selection and Purchase of Equipment for Trade and Industrial Classes*. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. *Vocational Interests of High School Students*. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. *Farm Mechanics in the Agriculture Curriculum*. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. *A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics*. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. *A Study of Vocational Conditions in the City of Fresno*. November, 1926. Price, 50 cents.

NEWS NOTES

- Vocational Education News Notes, volumes III-V, October, 1924-March, 1930.

California. Univ. Vocational education

NEWS

VOCATIONAL EDUCATION NOTES

VOL. V

BERKELEY, CALIFORNIA, MAY, 1930

No. 6

Vocational Education and the World We Live In*

By BENJAMIN W. JOHNSON

Assistant Director, Division of Vocational Education, University of California at Los Angeles.

Reports of unemployment, which has been more acute the past year than for some time previous, come from all parts of the country and from all fields of activity. It is not confined to this country. The British government finds it one of its most troublesome problems. Reports from Germany indicate economic conditions, evident by unemployment, are very distressing.

Why Increase Efficiency?

This situation has had its reaction upon vocational education. Why give training to increase efficiency when men and women are walking the streets looking for jobs? With only a surface glance at the problem this seems a reasonable conclusion, but deeper consideration reveals that this condition is but another argument for effective vocational training. Vocational education is not alone concerned with training the youth who leaves school to get a job—all important as this problem is—it is mainly concerned with the problem of occupational adjustment. Age, race, or sex do not limit the problem. It is concerned with the better adjustment of the worker to his job and with helping him when necessary to fit into another job to the mutual advantage of himself and his employer.

The amendment to the continuation-school law that goes into effect in California July first illustrates this conception of vocational education. All youths between the ages of 16 and 18 subject to the part-time or, as it is now called, continuation-school law, must receive four hours of schooling each week. If they are out of employment they are required to give 15 hours a week to schooling, and the high-school district must establish and maintain a program of guidance, placement, and follow-up.

* Summary of address given to students' Breakfast Club, University of California at Los Angeles, March 13, 1930. The club is considering various problems in relation to "The World We Live In."

This requirement grew out of the experience of the past eight or ten years. Part-time schools, as they were then called, assumed the obligation of guidance, placement, and follow-up as a part of their responsibility for training. It was found that from 20 per cent to 30 per cent of the attendance in some of the schools was made up of youths who, losing their job, came back to the part-time school and joined in the classes for as many hours as they could until a new job was secured, obtained through the placement department of the school. Of course it is not assumed that this splendid provision could be carried over in its entirety to the employment situation of adults. However, in view of the fact that adult education is increasing rapidly, and it is now known that adults learn as well, if not better, than do adolescent youths, the time of unemployment could be capitalized by every community offering training in various lines that would aid those temporarily out of employment to better adjustment and later employment.



C. V. A. CONVENTION, SAN JOSE CAMPUS, AUGUST 1-2

The Significance of Work

This condition of unemployment brings into sharp relief the significance of work in the world we live in. Everything else in life is endangered when an individual loses his job. However much we may emphasize the cultural side of life, the amenities of life, its pleasures and satisfactions, they are, in the last analysis, dependent upon a satisfactory job. Work, then, is the touchstone of life. This being true, the best possible preparation for doing that work well and efficiently follows as a matter of course. Vocational education, then, has to do with the most fundamental activity and responsibility the individual faces practically all the years of his life.

Work, looked at from another point of view, is an achievement well worth the best training. Dr. Richard C. Cabot in his book, "What Men Live By," gives it as one of the four pillars of life: "Work, play, love, and worship." His chapter on work should be read by every

teacher in vocational education. In it he shows clearly that work is only another form of play and is the basis of sound physical and mental growth and development. Drudgery is work pursued too long under unfavorable conditions, with hope and satisfaction of accomplishment taken out of it. This is a condition to be avoided by everyone and its removal is made possible only through training and education, not only of the employee, but also of the employer.

Dr. Thorndike, in an article written some years ago, on the "Psychology of Labor," gives another picture of the importance of work and the satisfaction that it gives. Briefly stated:

The first is the satisfaction from activity, physical or mental, at which one can succeed. In other words, man must be active if he is to remain alive and grow. "The labor problem is not so much to bribe men from idleness to activity as to induce them to be active in ways that are advantageous to the community."

The second is the satisfaction from the mastery, commanding, and leading of others—successfully discharging a responsibility. This is a satisfaction to everyone in varying degrees.

The third is the satisfaction from submission to the right kind of man. The recognition of leadership and following a worthy leader likewise has its appeal in varying degrees to everyone.

The fourth is the satisfaction from company and cheerfulness. To be a member of a group happily going about their work has a very great appeal. We like to be among those who are cheerful and happy.

The last and most important is the satisfaction from the feeling that one is a person of consequence who is, or should be, treated with respect by his community. The love of approval is one basis of self-respect and without self-respect life is a failure. Every successful teacher knows the power for stimulation in this last satisfaction. Approval, where deserved, offers a motive for the best that the learner has in him. "In general, the reward of labor is not only the power to buy food, shelter, clothes, and whatever else money will buy, which comes as a money wage, but the degree of gratification given to each and every human craving by the job itself." In this view of work, vocational education ranks first in importance.

The Trend Toward Training and Standards

In training for work vocational education is again most essential because learning by the pick-up method has been discarded as ineffective, wasteful, and extravagant. All of the professions such as medicine, law, and engineering have long ago given it up. One after another of the less highly technical and skilled occupations, likewise, has given it up. Occupations which are essential to community happiness and welfare are gradually being elevated by the state, and a certificate is being required to practice the occupation. Immediately standards are established and training becomes necessary to prepare people to meet these standards.

Another influence which magnifies the importance of training for work is the growing complexity of all fields of endeavor through the application of science and better organization. This calls for keener intellect, for better ability to deal with the problems within the trade, and for

job intelligence. This same influence reveals other factors involved in the work required in our present society. Work, itself, is no longer a matter of skills to be acquired through imitation. Efficient work is now recognized as involving important factors. The so-called "Richard's Formula," familiar to all vocational teachers, exemplifies this. Efficiency is manipulative skill, plus technical knowledge, plus trade intelligence, plus job judgment, plus morale. This, in a way, was recognized in the early guilds. When the employer indentured the apprentice he agreed to see that his apprentice learned more than the skills which he could pick up by imitation; that he was to be taught the "mysteries" of the trade without which the craftsman could not advance himself nor his trade. This is increasingly important today. We now recognize that the worker must not only be skillful, have technical and trade knowledge, and then judgment to apply these in his work, but he must also have the emotional force and the right standards and ideals to make the other factors effective.

Not Skill, Alone, but Social Adjustment

This thought is emphasized in the findings of a recent survey of the part-time-school youths. It is found that employment success in holding a job is more dependent upon the degree of emotional control—social adjustment—than on the degree of intelligence. The degree of intelligence and skill indicates the probable employment level, but *success* at any one of these levels depends on the degree of social adjustment.

All are familiar with recent statistics regarding the causes for the loss of employment by some 5000 workers investigated. Over 60 per cent lost their position, not from a lack of knowledge and skill in their work, but through their inability to make the right social adjustment. This points out to all responsible for vocational education that their responsibility is not discharged in training workers for skill and technical knowledge, alone, but also for full knowledge and training in how to meet the problems of human relationships involved in employment.

Another factor emphasizing the great importance of work is the universal regard everyone has for his job—his trade—his profession. Dr. Walter Dill Scott in his book, "Personnel Management," sets up the unit for measuring industrial accomplishment. This unit is not the job alone, but the "worker in his work." There can be no job without the worker and every job is what the worker makes of it. Our personality is to a surprising degree our work and how it affects us and we affect our work. We are known and identified more by our job than by our name. "Yes, I have his name. What does he do?" is the question asked when meeting a stranger.

Other Values in Vocational Training

The increasing enrollment in all fields of evening, extension, and correspondence courses in vocational training is evidence that many people are keenly concerned to take this work because it means advancement in some form or another for the work they are interested in doing. We now see, as never before, that this is the real field for vocational training of all kinds. It is the most immediate in its results and the most effective because given at the time when most needed.

The cultural values are not separate and apart from vocational education. All that has been said clearly points to the fact that satisfactory work and satisfactory living are the only avenues to the finer things of life—to a real culture. A knowledge of the contributions of the past is not in itself culture. Culture is measured by the effect of this knowledge upon the individual, by the extent to which it makes him responsive to the finer things of life and by the worth of his work, in satisfactions for himself and others—this is the real measure.

Dr. Eaton, in "Education for Vocations," states that our present standards of culture are derived from contributions of the past and the best contributions of the past are in a large measure vocational contributions. He states: "Culture is a process of valuing life and living it according to the values set upon it. The cultured man values life as a critic in terms of intellectual and emotional standards and strives so to live that those standards shall prevail."

While jobs of all kinds will become more specialized, the *significance of their relationships will increase*. Forward progress in our democracy is more dependent upon vocational education than ever, providing those responsible for vocational education see its import and realize that it is something far more than increasing the skill of the hand. It is, consequently, the realization that training and education are continuous and an integral part of life and satisfactory living. He who ceases to learn must perish. Dr. Thorndike's findings in regard to adult learning no longer give us any excuse for not accomplishing what we should on the grounds that "an old dog cannot be taught new tricks." The college youth with his diploma should not say his days of learning are over; the achievement he hopes successfully to accomplish is conditioned upon how well he is keyed to the principle of growth and learning. The facts he may have gained in college will be out of date ten years later. The adult who has heretofore bemoaned his lack of schooling and degrees can take new hope, realizing that it is in himself that his success lies.

How can vocational education best be given? A summary of what has been said before clearly indicates that life and learning are synonymous and that any form of education must be gained in close cooperation with the experiences for which improved knowledge and skill and attitudes are required. Vocational education will increasingly become in the future some form of part-time or cooperative training made available at all times of the year, during all of man's wakeful hours, and without any discrimination as to race, sex, or religion. The opportunity, then, for everyone responsible in any way for vocational education has never been greater than at the present time. The importance of this work has never been fraught with greater consequences.

Summer Session Courses in Vocational Education

The summer session courses at Los Angeles and Berkeley were recently announced. Those wishing further information should address the Division of Vocational Education of the University of California at either Berkeley or Los Angeles.

Persons who desire to begin their teacher-training work leading to a vocational arts credential will be required to

take courses 361, 362, and 364. Candidates who have completed the first half of the teacher-training program in either of the centers maintained by the University of California will take courses 365, 366, and 367, and in certain cases, S164.

Advanced courses are offered for the holders of the vocational arts type credential in trade and industrial education who have completed the first 16 units of the teacher-training course. Course 363, Analysis and Organization of Related Technical Curricula, 90 hours, 6 units, when completed entitles the candidate to the credential for giving full-time instruction in related technical subjects. These six units also apply in securing the long-term credential.

Other vocational courses may also be applied in satisfaction of the six units required for the long-term credential. Courses 167s, 161A, and S164 are recommended to vocational teachers. Approval should be secured from the instructor in advance.

Below are listed the numbers, titles, instructors, and hours of the courses. As formerly, the classes are given from Mondays to Fridays, inclusive.

AT BERKELEY

- S160. Vocational Education: General Course. Professor LEE
Daily at 10.
- S162. Continuation Education. Daily at 2. Dr. PALMER
- S164. Vocational Guidance. Daily at 11. Mr. CAMPION
- 167C. Cooperative Vocational Education. Mr. MALLARY
Daily at 8.
- 167E. Organization and Administration of Evening Schools.
Dr. KERSEY
- 167s. Administration and Supervision of Vocational Education. Daily at 9. Mr. CAMPION
- 365. Problems of Trade Technical Instruction. Mr. MALLARY
Daily, 10-12.
- 367. Civic and Employment Relations. Mr. MALLARY
Daily at 9.
- S260A. Vocational Education: Seminar. Professor LEE
M W, 4-6.

AT LOS ANGELES

- S160. Vocational Education. Daily at 11. Mr. MANN
- 161A. Industrial Arts. Daily at 11. Mr. NIHART
- S164. Vocational Guidance. Daily at 12. Dr. RICCIARDI
- 167s. Administration and Supervision of Vocational Education. Daily at 11. Dr. RICCIARDI
- 361. Occupational Analysis and Curriculum Construction.
Mr. JOHNSON, Mr. WAIDELICH
Two sections, daily, 8-10.
- 362. Technique of Vocational Instruction.
Mr. JOHNSON, Mr. WAIDELICH
Two sections, daily at 10.
- 363. Analysis and Organization of Related Technical Curricula. Mrs. DONOVAN, Mr. WALTON, Mr. WRIGHT
Section 1, 9-12; Section 2, 9-12; Section 3, 1-4.
- 364. Theory and Administration of Vocational Education.
Mr. KEINHOLZ
Daily at 11.
- 365. Problems of Trade Technical Instruction. Mr. STIER
Daily, 10-12.
- 366. Part-time, Cooperative, and Trade-Extension Education.
Mr. STIER
Daily at 8.
- 367. Civic and Employment Relations. Mr. MANN
Daily at 9.

Social and Psychological Aspects of Homemaking*

By MARGARET B. ALLEN

The development of our knowledge of human relationships has been so recent that only the most forward-looking teachers of home economics have as yet introduced this most fundamental instruction into their courses. One attempt to develop such instruction is being carried out by the department of eugenics at Vassar College, which holds a summer institute for the purpose of studying and discussing such subjects as mental hygiene, child guidance, problems of religious adjustment, education of children in a changing civilization, what parents should know about schools and education, the family, problems of the consumption of wealth, etc., in addition to the more familiar subjects of food production, household technology, and similar subjects. Other colleges sometimes include in their home-economics curriculum courses in social institutions, the family, etc. One also finds classes dealing with social hygiene, and with child-parent relationships. So far these opportunities are available in a limited number of schools.

Perhaps the attempt of the Fieldston¹ School branch of the Ethical Culture School of New York is a move in the right direction. Various aspects of this problem have also been dealt with by other agencies, as the Y. W. C. A., which has sent women doctors to lecture to women college students on the sex aspect of marriage. But aside from the above-mentioned courses and various child-study courses, the curriculum of the most modern schools prepare the girl for the problems of home and married life. Instead of being educated for marriage, the girl is usually educated for housewifery, and the degree of success she may attain as a wife or mother is the result of her previous home training, or the trial-and-error method. On the other hand the school has an opportunity to share in bringing about a better situation in the home.

The Need for Education for Marriage

The need for such a course may be primarily indicated by the number of marriages found unsatisfactory today for reasons other than economic. G. V. Hamilton,² in a study of 200 men and women finds temperamental dissatisfactions to head the list with 37 for women and 49 for men; physical, 30 and 39; lack of personal freedom, 18 and 10; economic, 16 and 8, etc. In divorce statistics for this country in 1924 we find cruelty at the head of the list as a cause for divorce in 37.2 per cent of the cases, desertion 32.9, adultery 10.1, drunkenness 1.3, neglect to provide 3.7, and on down the list.

By and large the causes for divorce are due to:

- I. Conditions existing in society
 - a. Modern position of women
 - b. Increase in industrialism
 - c. Weakening of social control of marriage and divorce

2. Conditions in the family
 - a. Personal character defects
 - b. Wrong attitude toward home and family life
 - c. Economic inadequacy
 - d. Ignorance of the meaning of marriage
 - e. Social inadequacies
 - f. Religious differences
 - g. Inefficient housewifery

Most schools at present deal chiefly with economic inadequacy and inefficient housewifery satisfactorily, but surely there is need for further educational opportunities along the lines of those other causes for divorce mentioned above. No amount of education will ever completely remove these causes for failure in the career of marriage any more than it completely removes causes for failure in any other career; but there is every reason to believe that through adequate knowledge there will be sufficient success to make the effort worth while. Inasmuch as there are twenty million housewives in the United States at present, it would seem that this career is important enough to provide careful preparation for those about to enter into it. Four out of five women marry, and deserve at least as good a preparation as the one-fifth which presumably enters into other careers. Ernest Groves³ says, "It is a mistake in our education for life which costs society such a desperate price that our schools do not train youth better for home and parenthood responsibilities."

Some teachers feel that material of this nature can best be given incidentally with other phases of homemaking and this may be true, but whether given seemingly incidentally or in a separate course the teacher must have in mind certain items which are to be included.

If the material is outlined as a separate course it may clarify thinking in regard to it and therefore a suggested course is outlined here. A tentative outline of a program for vocational education in homemaking from the psychological and social point of view, dealing with the physical in such degree as seems necessary to the course, is presented.

Outline of a Course in the Social and Psychological Aspects of Homemaking

- I. Marriage as an institution
 - a. Advantages and disadvantages of marriage for men and women
 - b. Social significance of marriage
 - c. Requirements of housewifery and of "housebandry"
- II. Choosing a life mate
 - a. The biological significance of marriage
 - b. Qualifications for marriage
 - c. Emotional aspects of marriage
 - d. Attendant problems
- III. The family
 - a. Brief historical survey
 - b. Preconditions of family integrity
 1. Sound heredity

* This material is part of a term paper prepared in partial satisfaction of the requirements of a course in Vocational Guidance, Ed. 164, University of California.

¹ The Survey. February 15, 1929. p. 678.

² Woman's Home Companion. Vol. 55, no. 8, August, 1929. p. 21.

³ Groves, E. R. Social Problems and Education. p. 162.

2. Personality characteristics, development of character
3. Family pattern
4. Employment
5. Education
6. Recreation
7. Spiritual and aesthetic expression

IV. Proposed remedies for present instability of the home

- a. Legislation
- b. Education

The difficulties of presenting the type of education suggested above are apparent. The development of character is the focal point of the whole subject, and that has long been considered a private rather than a public matter. The difficulty of translating ethical values into life is a challenge to the most successful teacher, who will necessarily be a person of broad experience and sympathies, one who will inspire rather than impart precepts to her pupils. Such a course as that proposed will be criticised on the ground that it deals with problems which are personal and private in nature, and which therefore cannot be considered in any helpful sense to pupils in general. But this we will try to meet with the counter argument that many problems are common to a degree to all. Reticence over matters of private import is being replaced by frankness, and we feel that the present generation is ready for an educational opportunity of this sort whereas the past generation would not have been ready.

As we have intimated above, various aspects of the problem need careful presentation in order to avoid the danger of becoming a body of precepts rather than true education. Methods may include carefully worked out try-out experiences in many aspects of home life, care of children, care of household financial management, etc., reviews of books and magazine articles which deal with aspects of the problem, case studies, life situations dramatized by the pupils themselves, personal interviews of pupils with the view to adjustment of individual problems, talks and lectures by experts in various fields, and visits to homes, institutions, and industries where the principles of homemaking are involved.

The field is too broad to be covered in this one course; child study, alone, could occupy a good portion of the school curriculum, but for orientation purposes we believe even a short unit should be of value. May it at least be an earnest consideration of some of the problems rising out of our universal experience.

Institutions Offer Home Economic Courses

By MAUDE I. MURCHIE

Chief, Bureau of Homemaking Education

Many California teacher-training institutions offer courses of special interest both to homemaking teachers, who might wish to extend their scope of learning, and to qualified persons who might wish to begin a program of training in this special field. These institutions are:

STATE TEACHERS COLLEGES	SUMMER SESSION DATES
Humboldt (Arcata).....	6 weeks—June 24 to August 2
Chico.....	3 weeks—6 weeks—June 23 to August 1
San Diego (Term I).....	6 weeks—June 23 to August 1
San Diego (Term II).....	4 weeks—August 4-26
San Francisco.....	6 weeks—June 23 to August 1
San Jose.....	6 weeks—June 23 to August 1
Santa Barbara.....	6 weeks—June 30 to August 8

UNIVERSITIES

University of California, Berkeley.....	6 weeks—June 30 to August 9
University of California at Los Angeles.....	6 weeks—June 30 to August 9
Stanford University.....	June 16 to August 30
University of Southern California.....	8 weeks—June 16 to August 6
	6 weeks—June 30 to August 7
	3 weeks—August 8 to August 30

Catalogues may be secured from each of these institutions. Each offers many additional courses of interest to teachers, some of which are listed below:

HUMBOLDT STATE TEACHERS COLLEGE (ARCATA)

Department	Courses	Sem. units
Home Economics.....	Interior decoration.....	2
	Art structure.....	2
	Elementary crafts.....	1 or 2
Art.....	Jewelry.....	1 or 2
	Metal arts.....	1 or 2
	Pottery.....	1 or 2
	Toy craft.....	2
English.....	Children's literature and story telling.....	2
Science.....	Heredity and evolution.....	3
Economics.....	Social and economic aspects of immigration.....	3
Physical education.....	Health education.....	2

CHICO STATE TEACHERS COLLEGE

Natural science.....	Eugenics.....	2
Education.....	Current American life and thought.....	2
	Individual instruction.....	2
Psychology.....	Tests and measurement.....	2

SAN FRANCISCO STATE TEACHERS COLLEGE

First three weeks

Biological science S103.....	Eugenics.....	2
Biological science S122-A.....	Child hygiene (birth to adolescence).....	1
Art S1.....	Introductory art.....	2
Art S10.....	Art structure.....	2
Education S121A.....	New trends in educational method.....	1
Home economics S4.....	Home economics applied to the rural school (food).....	1

Second three weeks

Biological science S122-B.....	Child hygiene (adolescence).....	1
Home economics S4.....	Home economics applied to the rural school (sewing).....	1
Psychology S117.....	Mental hygiene problems of childhood in adolescence.....	2

SAN JOSE STATE TEACHERS COLLEGE

Department	Courses	Qtr. units
	Elementary nutrition and dietetics.....	3
	Home cookery and table service.....	3
	Clothing principles.....	3
	Costume design.....	3
	Food production and marketing.....	3
Home economics.....	Textiles.....	3
	Cafeteria management.....	3
	Advanced dressmaking.....	3
	House decoration and furnishing.....	3
	Child training project.....	3
	Part-time and adult education.....	3
	Problems in homemaking education.....	3

SAN DIEGO STATE TEACHERS COLLEGE

Art 3.....	Art backgrounds.....	2
Art 112c.....	Appreciation of color.....	2
Art S96A.....	Costume design.....	2
Education CXXVI.....	Children's literature.....	2
Education Sc.....	Teaching children how to study.....	2
Education CLIX.....	Growth and development of children (upper division).....	2
Physical education 151.....	Health education.....	2
Psychology 102c.....	Child growth and development.....	2

SANTA BARBARA STATE TEACHERS COLLEGE

	Elementary food study.....	2
	Table service and history of table appointments.....	2
	Large quantity cookery.....	1
	Advanced clothing or tailoring.....	2
Home Economics.....	Household arts methods.....	2
	Health and child care.....	2
	Elementary dietetics and nutrition.....	2
	Household science methods.....	2
	First principles of clothing.....	3
	Millinery.....	2

UNIVERSITY OF CALIFORNIA, BERKELEY

Economics S181.....	Control of poverty.....	2
Health 177.....	Health instruction in the secondary schools.....	2
Art 185.....	Advanced design.....	2
Household science 2.....	The elements of nutrition.....	2
	S100..... Food economics.....	2
	S125..... Experimental cooking.....	2
	S199..... Special study for advanced undergraduates.....	2
	S214..... Research.....	2-4
	S216..... Seminar in nutrition.....	2
Hygiene S4.....	Elementary public health.....	2
	S101..... Child welfare.....	2
	S102..... Health of the school child.....	2

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Art 2A.....	Art-structure.....	2
13.....	Costume.....	2
32A.....	Art-structure.....	2
39A.....	Weaving.....	2
152A.....	Art-structure.....	2
156A.....	Interior decoration.....	2
Educational psychology S111.....	Growth and development of the child.....	2
	S112..... Psychology of adolescence.....	2
Home economics 32.....	Elements of nutrition.....	2
	128..... Advanced nutrition.....	2
	162..... Household economics.....	2
	364..... The teaching of home management.....	2
Hygiene A.....	Home hygiene and care of the sick.....	No credit
S4.....	General hygiene.....	2
S101.....	Child health.....	2

STANFORD UNIVERSITY

Art 3.....	Design in form and color.....	5
5.....	Art of house design.....	5
103.....	Advanced color design.....	5
105.....	Advanced course in art of the house.....	5
112.....	Handicrafts: textiles.....	5
Education 190.....	Growth and development of the child.....	3
231.....	The high-school curriculum.....	4
237.....	Adult education.....	4

UNIVERSITY OF SOUTHERN CALIFORNIA

Agriculture 150f.....	Home gardening and landscaping, 6 weeks.....	2
Architecture and fine arts 135.....	Applied design, 6 weeks.....	2
	146s..... Art appreciation, 8 weeks.....	2
	9..... Art structure, 6 weeks.....	2
	144..... History of decorative design, 6 weeks.....	2
Education 119.....	Organization and supervision of instruction, 3 weeks.....	2
	131..... Growth and development of the child, 8, 6, and 3 weeks.....	2
	132..... Mental differences and educational adjustments, 6 weeks.....	2
	156..... Classroom methods and management in secondary schools, 6 weeks.....	2
	223..... Directed teaching in senior high schools, 6 weeks.....	2
	219a..... Seminar in supervision, 6 weeks.....	2
	245..... Curriculum making in secondary schools, 6 weeks.....	2
ociology 104.....	The family as a social institution, 6 weeks.....	2
138.....	Eugenics, 3 and 6 weeks.....	2

Educational Film Service

Counselors and teachers in agricultural, commercial, continuation, home economics, and trade and industrial education will find a wealth of material in educational films. Science, manufacture and industry, and occupations have all been pictured in most instructive and entertaining ways. Information regarding these films may be secured by writing for descriptive catalogs from:

E. I. du Pont de Nemours and Compnay, Incorporated. Publicity Bureau, Wilmington, Delaware. Free films. Industrial films—The making and use of explosives.

Eastman Teaching Films, Incorporated, 343 State street, Rochester New York.

Geography, general science, and health.

Ford Motor Company, Educational Films Library, Detroit, Michigan. Films for sale; not for rent.

Industrial films, nature study, health, civics and government, and scenic films.

General Electric Company, Publicity Department, Schenectady, New York, or 116 New Montgomery street, San Francisco. Free film service.

Industrial, biographical, scientific.

Great Northern Railway, Advertising Department, St. Paul, Minnesota.

Scenic and agricultural films.

Kodascope Libraries, Incorporated, 35 West 42nd street, New York City, also 643 South Hill street, Los Angeles, and 241 Battery street, San Francisco. Catalog price, 25 cents. \$1.50 minimum film service, plus percentage according to zone and time held.

Travel, sports, manners and customs; industry, forestry and agriculture; and popular science, useful arts, natural history.

Northern Pacific Railway, Passenger Traffic Department, St. Paul, Minnesota. Transportation charges only. Scenic, educational, industrial, and agricultural films.

Spiro Film Corporation, 161-79 Harris avenue, Long Island City, New York.

Scientific, governmental, geographic, travel, agricultural, manufacture, and industrial films.

U. S. Department of Commerce. Bureau of Mines, Washington, D.C. Transportation charges only. Industrial, geographic, first-aid films.

United States Steel Corporation, Bureau of Safety, Sanitation, and Welfare, 71 Broadway, New York City. Free.

Industrial and welfare films.

United Cinema Company, 130 West 46th street, New York City.

Natural science, education, customs, sociology, life science, personal hygiene, engineering, agriculture, domestic science, commerce, manufacture, geography, and travel.

Visagraphic Pictures, Incorporated, 247 Park avenue, New York City. Shipping charges only.

Industrial, commercial, home conveniences.

Western Electric Company, Motion Picture Bureau, 120 West 41st street, New York City. Transportation charges only. Express both ways.

Industrial, commercial.

Y.M.C.A. Motion Picture Bureau, 120 West 41st street, New York City, and 1111 Center street, Chicago. Transportation charges only, and charges for damage to films. Industrial, scenic, health, and safety and government.

COUNSELORS' ASSOCIATION ORGANIZED

A Bay Section Counselors' Association was formed in December with the following officers elected:

President—Ethel Shewmaker, East Oakland High School.
Secretary—Lisette Reinle, Prescott Junior High School, Oakland.

A Curriculum On Employment Levels

By RUTH L. TURNER
Placement Secretary, Berkeley Public Schools

A course of study which would fit the needs of a continuation school must have certain definite characteristics. It must lead toward a fixed goal. It must be so organized that it can be conducted on an entirely individual basis. It must lead toward employment. It must be organized into short units so that each student can visualize the goal ahead and see that it is within his reach.

The average continuation-school pupil has left full-time school due to unnatural conditions somewhere along the line. He has either been a misfit or a failure in school or has had to leave school due to abnormal conditions in the home. He comes to the continuation school without much faith in its offerings. If he is working and has only four hours to attend school during the week, something of real value that is definite and concrete must be given him to make that four hours really worth while. Whether he is a daily student or one who comes at irregular intervals, the course must be so planned as to meet his individual needs.

An instructional-material committee was formed in the Berkeley Continuation School during the spring of 1930, composed of the members of the teaching staff, with the purpose of making a revision of the entire course of study. The committee, in discussing its problem decided that in all courses where vocational training was given, placement should be set as the goal and courses should be worked out according to the placement levels in actual employment. Rather than follow the old system, which has proved ineffective, of sending out report cards at set intervals, the committee recommended the issuance of certificates of completion showing that a certain definite employment level had been achieved, thus giving the students a fixed goal toward which to work.

As an example of a course organized on this basis the outline of a course in comptometry which has recently been worked out for use in the Berkeley Continuation School is given. The course is planned in three units, the completion of each unit forming an employment level. Miss Marie Adler, teacher of comptometry in the Berkeley Continuation School and in the Trade Extension Division of the Evening High School, and Miss Ruth Turner, director of placement, Berkeley Public Schools, organized the course.

COURSE IN COMPTOMETRY

Outlined According to the Unit System on a Placement Basis

The following material is the outline of a course in comptometry designed for use in a continuation school. The course is outlined according to the unit system and is so planned that the satisfactory completion of each unit would prepare the student for a certain level of placement. It is divided into three units and each unit is subdivided into three parts. This is done to adapt the course to the needs of the student who comes once a week as well as to the daily student.

At the satisfactory completion of each unit or part of a unit, a letter may be given the student showing the amount of work accomplished. At the end of the third

unit a certificate of completion is granted the student, showing that he is recommended for placement.

An additional unit of work may be given to advanced students, fitting them for any specialized kind of work in comptometry. This would include lumber, foreign exchange, tonnage, profit and loss, interest, etc.

Educational prerequisites—two years or more of high-school education.

Objectives—To train the student in the various operations on the comptometer involving speed and accuracy. To train the student to write figures legibly.

Ultimate aim—Placement.

Approximate length of course, 64 lessons.

Unit I. Lessons 1 to 22—22 lessons.

Unit II. Lessons 23 to 45—23 lessons.

Unit III. Lessons 46 to 64—19 lessons.

It is recommended that the course be given in two-hour periods in order that the necessary material may be covered in the most efficient manner.

Employment levels

Unit I. Auditing work of a retail store or mail order house.

Unit II. Insurance office work, payroll department of any concern.

Unit III. Placement in practically any type of office where a comptometer is used.

FORMS USED

Three sets of forms are used in the course; the first is the Teacher's Outline, which is for the teacher's use only. In planning this course, materials were taken from various sources. No one text seemed to be designed for work in a continuation school. The teacher's outline is merely an index to the materials used in the course.* The next form is a set of three pages which form the Pupil's Record, and is designed to be pasted in the student's folder. Each student will get his own folder at the beginning of the class period and report to the teacher for the material to be used that day. If a grade of A or B has been given on the previous lesson, he may progress to the next lesson; otherwise he should repeat the previous lesson. The date and grade of the day's work is entered by the teacher at the end of the period.

A resumé of the work done by the student and an attendance record is kept on the opposite side of the folder. These are filled in at the completion of each unit.

	A	B	C	D
	Excellent	Good	Fair	Poor
Addition				
Subtraction				
Multiplication				
Division				
Application				

A copy of the pupil's record is given below:

* A mimeographed copy of this outline, lesson by lesson, may be had from the Research and Service Center, University of California, Berkeley, California.

COURSE IN COMPTOMETRY

Name.....

	Date	Grade			
		A	B	C	D
Unit I, Part 1					
Lesson 1. Key location.....					
Lesson 2. Addition Keys, from one to five.....					
Lesson 3. Addition, Combination 6-7-8-9.....					
Lesson 4. Addition, 2-column.....					
Lesson 5. Addition, 2-column.....					
Lesson 6. Addition, 2-column.....					
Lesson 7. Addition, 2-column.....					
Lesson 8. Addition, 3-column.....					
Lesson 9. Multiplication, 2 figure factors.....					
Lesson 10. Multiplication, 3-figure factors. (Natural fingering)					
Lesson 11. Multiplication, 3-figure factors. (Reverse fingering)					
Unit I, Part 2					
Lesson 12. Addition, 4-column.....					
Lesson 13. Addition, 5-column.....					
Lesson 14. Addition, 5-column.....					
Lesson 15. Multiplication, use of thumb.....					
Lesson 16. Multiplication, use of decimals.....					
TEST.....					
Unit I, Part 3					
Lesson 17. Multiplication of fractions..... (Each student supplied with fraction card)					
Lesson 18. Multiplication of fractions.....					
Lesson 19. Multiplication of fractions.....					
TEST.....					
Lesson 20. Use of sales slip, thumbing and turning Use of rubber thumb.....					
Lesson 21. Sub-totaling sales slips.....					
Lesson 22. Sub-totaling sales slips.....					
TEST.....					
Unit II, Part 1					
Lesson 23. Permanent decimal point.....					
Lesson 24. Permanent decimal point.....					
Lesson 25. Permanent decimal point accumula- tion.....					
Lesson 26. Permanent decimal point accumula- tion.....					
Lesson 27. Permanent decimal point accumula- tion.....					
TEST.....					
Unit II, Part 2					
Lesson 28. C.M.Cwt. Permanent decimal.....					
Lesson 29. C.M.Cwt. Permanent decimal.....					
Lesson 30. C.M.Cwt. Accumulation.....					
TEST.....					
Lesson 31. Figure inventory.....					
Lesson 32. Figure invoices.....					
Lesson 33. Compound multiplication.....					
Lesson 34. Compound multiplication and cross addition.....					
Lesson 35. Figure invoices.....					
Lesson 36. Payroll problems.....					
Lesson 37. Payroll problems (hourly basis).....					
Lesson 38. Payroll problems (piece work).....					
Lesson 39. Payroll problems (over-time).....					
TEST.....					
Unit II, Part 3					
Lesson 40. Figure discounts.....					
Lesson 41. Subtraction.....					
Lesson 42. Subtraction.....					
Lesson 43. Subtraction.....					
Lesson 44. Depositors' Ledger.....					
Lesson 45. Figuring discount and net.....					
TEST.....					

	Date	Grade			
		A	B	C	D
<i>Unit III, Part 1</i>					
Lesson 46. Figuring gross—discount and net.....					
Lesson 47. Figuring gross—discount and net.....					
Lesson 48. Figuring gross—discount and net.....					
TEST.....					
<i>Unit III, Part 2</i>					
Lesson 49. Figuring chain discounts.....					
Lesson 50. Figure invoices.....					
Lesson 51. Figure invoices.....					
Lesson 52. Figure invoices.....					
Lesson 53. Figure invoices.....					
TEST.....					
<i>Unit III, Part 3</i>					
Lesson 54. Division—2-figure factor.....					
Lesson 55. Division—3-figure factor.....					
Lesson 56. Division containing decimals.....					
Lesson 57. Division containing decimals.....					
TEST.....					
Lesson 58. Division containing decimals.....					
Lesson 59. Division containing decimals.....					
Lesson 60. Left to right multiplication. Proving division to use quotient times divisor to arrive at dividend.....					
Lesson 61. Left to right multiplication.....					
TEST.....					
Lesson 62. Gross and dozen.....					
Lesson 63. Gross and dozen.....					
Lesson 64. Gross and dozen.....					
FOUR TEST LESSONS.....					

Summer Session Courses in Continuation Education

In addition to the list of courses in vocational education which are of special value to continuation-school teachers, a variety of courses in many fields are offered at the University of California during the 1930 summer sessions. The special courses in vocational education are as follows:

IN BERKELEY

S160. Vocational Education: General course.	Professor LEE
S164. Vocational Guidance.	Mr. CAMPION
167C. Cooperative Vocational Education.	Mr. MALLARY
S162. Continuation Education.	Dr. PALMER
S260A. Vocational Education: Seminar.	Professor LEE
167S. Administration and Supervision of Vocational Education.	Mr. CAMPION
367. Civic and Employment Relations.	Mr. MALLARY

IN LOS ANGELES

S160. Vocational Education: General course.	Mr. MANN
S164. Vocational Guidance.	Dr. RICCIARDI
336. Part-time Cooperative, and Trade Extension Education.	Mr. STIER
367. Civic and Employment Relations.	Mr. MANN

The seminar in vocational education during the summer session of 1930, at Berkeley, will make an intensive study of the problems created by that part of the Continuation Education Law requiring the attendance of unemployed youths upon continuation classes for fifteen hours per week. Particular attention will be given to the matter of

curricula. Persons contemplating enrolling in the seminar, should write to the instructor, Professor Edwin A. Lee, for suggestions as to advance preparation. The hours scheduled are from four to six on Mondays and Wednesdays.

For commercial, homemaking, and trade teachers in continuation schools other courses for special teachers in this field are listed elsewhere in this publication.

In fields other than vocational education, many courses are offered this summer which will be of interest to continuation-school teachers. Among them are the following:

IN BERKELEY

Economics:

- | | |
|-------------------------------|-------------------|
| S180. The Control of Poverty. | Professor BOSSARD |
| S181. Care of Dependents. | Professor BOSSARD |

Education:

- | | |
|--|------------------|
| 136. The Activity Program of the Public School. | Professor MERIAM |
| 334. Methods in Child Welfare and Attendance Supervision. | Mrs. HILL |
| 381. Problems of Human Adjustment. | Dr. STOLZ |
| 193. Mental Hygiene Problems of Childhood and Adolescence. | Dr. RICHMOND |

IN LOS ANGELES

Economics:

- | | |
|-------------------------------|-------------|
| S180. The Control of Poverty. | Dr. JAMESON |
| S181. Care of Dependents. | Dr. JAMESON |

Education:

- | | |
|--|-----------------|
| 337. The Visiting Teacher and the Problem Child in School. | Miss TROWBRIDGE |
| 338. The School's Responsibility for the Problem Child and his Adjustment. | Miss TROWBRIDGE |

Full details of these courses, including a brief description, hours, and units of credit will be found in the respective summer-session catalogues.

Chaffey Teaches Orange Packing

"Have you a certificate in orange packing?" is being asked girls who apply for work in the orange-packing plants of the Chaffey Union High School district since the establishment of courses leading to a certificate by the continuation school of this district. The objectives of the course are: to train those who desire to become orange packers in all the fundamentals of orange-packing-house routine, and to give enough practice under supervision so that the girls will be able to pack between forty and forty-five boxes of oranges a day. The course is held primarily for part-time students of Chaffey Union High School. Each member of the class is enrolled in Chaffey Continuation School and a daily record of attendance is kept.

The instructors are experienced packers in the various plants which are cooperating; they have emergency credentials for teaching orange and lemon packing and are paid by the school. Careful records are kept of each girl's progress and a chart made of her speed rate.

About one hundred hours of instruction are required to train a girl to pack oranges according to the standard pack for 1930. Each pupil who completes the course and can satisfactorily pack thirty-five to forty boxes a day is granted a certificate showing she has completed the standard course in orange packing.

There are at present thirteen patterns to learn according to the size of the oranges. Packers must learn the correct position of the box, the size of paper to use, how to pick up the orange, how to pick up the paper, the correct twist, the position of the stem-end of the orange and of the print facing of the labels on the wrappers. The neat appearance of a box of oranges is not a matter of chance, but of careful study and hours of training.

Mr. Kenneth Hanson, the supervisor of instruction in orange and lemon packing, secures the instructors from the cooperating plants, arranges for materials used and keeps the progress records. Mrs. Grace Palmer, director of the continuation school in Ontario, was the pioneer in initiating this type of plant training for girls, and other communities in the orange belt, after a study of the Ontario plan, are providing similar training. So successful has been this experiment in plant training for girls that this year a course in assembly work at the Hot-Point Electric Company plant in Ontario has been added. Carefully worked out lesson sheets containing diagrams of parts to be assembled furnish material for the course. The instructors are expert assemblers in the plant.

LESSON SHEETS FOR CONTINUATION SCHOOLS

The Research and Service Center of the Division of Vocational Education has on hand the following lesson sheets for pupils. Upon request, two copies will be sent to any school, and additional copies will be sent at one-half cent a sheet.

AVAILABLE LESSON SHEETS

Automechanics—

Sample unit lesson in:

- "How the ignition system works."
- "Bootleg gasoline."
- "What feeds gas to your car."
- "How to break in your new car."—Huntington Park.

Beauty culture—

- Sample unit lesson in sterilization.—Long Beach.

Cash register—

- Five lessons on the use of the cash register.—Sacramento.

Orientation—

- Unit lessons as an introduction to enrollment in a continuation school.—Huntington Park.

Office practice—

- Exercises in office practice.—Oakland.
- Outline of a unit system of office practice with sample lessons.—San Francisco.

Painter—

- Unit lessons for painters, 14 lessons.—Sacramento.
- English for business life.—Metropolitan High School, Los Angeles.

Comptometry.—Berkeley Continuation High School.

Other lessons will be available later. In the meantime other lesson sheets are desired. Requests have come for lessons in cobbling, dental mechanics, optical mechanics, printing, work in dental and barber supply houses, pottery work, tire repairing, engraving, bricklaying, sign-painting, agriculture (truck gardening, etc.), and egg exchange work. Lessons for pupils in these occupations are solicited.

Vocational Education News Notes

Vol. V BERKELEY, CALIFORNIA, MAY, 1930 No. 6

Issued periodically by the University of California, Division of Vocational Education, in cooperation with the Commission for Federal- and State-Aided Classes, State Board of Education.

DEPARTMENTS

Agricultural Education Trade and Industrial Education
Business Education Vocational Guidance
Continuation Education Homemaking Education
California Vocational Association

Editor—Special Agent for Research and Service, Division of Vocational Education, University of California,
EMILY G. PALMER.

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Address all communications to Research and Service Center, Division of Vocational Education, University of California, Berkeley, California.

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BULLETIN ON VOCATIONAL CREDENTIALS

Regulations governing the granting of special state teachers' credentials in California of vocational-arts type and of supervision type in trade and industrial education is the title of a recent bulletin issued by the State Department of Education, Division of Teacher-Training and Certification. This bulletin is a supplement to Bulletin No. H-2, and may be secured from the Division of Teacher-Training and Certification, State Department of Education, Sacramento.

MORE FUNDS FOR VOCATIONAL EDUCATION

The support of all members of the California Vocational Association and of all other persons in the state interested in providing further opportunities for industrial and commercial training is urged for the passage of the Capper-Reed Vocational Education Bill. This bill provides additional funds to the states and territories for the training of persons for trade and industrial and for commercial occupations.

The American Vocational Association is supporting this bill with legislative committeemen in Washington; in addition each state has a legislative committee organized to direct the support from the local communities.

Here are some steps which must be taken:

First, wire or write your favorite congressman in Washington for a copy of the Capper-Reed Vocational Education Bill; this is House Bill 10821, or Senate Bill 3969.

Second, secure the endorsement of this bill from such organizations as you can interest, for example, labor organizations, civic clubs, business and employers associations, personnel and technical associations, educational associations, welfare organizations, newspaper associations. Third, notify the state legislative chairman of the letters or resolutions which you have and hold them for word from him as to the exact time when all messages should be sent. Letters from non-educational organizations will be perhaps even more effective than from teachers. These letters of endorsement should be addressed to Senator Hiram W. Johnson, or to Senator Samuel M. Shorthridge.

In addressing organizations on this bill you may well picture to them the extended development of the vocational program in your community which this fund would make possible, the unemployment in the city which might be relieved through adequate training, the retraining which is necessary due to changes in industrial processes, the foremanship training which might be offered larger organizations, the help which might be given the small retailer in learning more about accounting or store management, and the specialized training which could be offered boys and girls just entering employment.

First of all send for a copy of the bill and second write Louis B. Travers, director of Adult and Continuation Education, Oakland, California, who will tell you the name of the nearest committee member in your section.—L. B. TRAVERS, Chairman, California Legislative Committee.

For Girls in Household Service

Under the leadership of Donald H. Biery, director of vocational guidance and placement of the Oakland public schools, representatives of approximately twenty organizations in Alameda County have organized to assist in the regulation of the work of girls who serve in homes in the county. The organizations represented on the recently organized East Bay Committee on Household Service include almost all the agencies concerned with the placement of girls in homes; state, church, school, and community chest agencies are represented.

It is the purpose of the organization to devise standards for working conditions for girls 15 to 21 years of age who are working in homes either full-time or part-time. It is hoped to improve the training of the girls for such work and of the conditions under which girls work where necessary by means of standards of placement.



OFFICERS OF THE C. V. A.

President—Walter C. Patchett, Santa Rosa High School.
 Vice-President—G. Laurine Broadwell, assistant director of vocational education, Los Angeles.
 Vice-President and Publicity Manager—Henry Batchelder, Point Loma High School, San Diego.
 Secretary-Treasurer—W. H. Van Dyke, Petaluma High School.
 Editor—C. J. Benz, Frick Junior High School, Oakland.

On To San Jose

"All roads lead to Rome." In California all roads, in so far as the vocationally minded teachers and supporters are concerned, will lead to San Jose on August 1-2, 1930.

The attendance at these annual conventions of the C. V. A. has increased from year to year. In this respect the San Jose meeting will be no exception, all reports indicating a record-breaking attendance from every section of the state from secondary schools and also from teachers' colleges.

California is a state covering every possible climate and condition. This being so, it makes it hard for the different groups and sections to understand the many and varied problems among our own group. Realizing this, men and women throughout the state felt it was very important to meet once a year, to further the one great cause we are all striving for—vocational education.—W. C. PATCHETT, President, California Vocational Association.

High Lights On the California Vocational Association Fifth Annual Conference

By B. W. SPAULDING

Chairman, Local Central Committee, C. V. A.

The fourth annual conference of the California Vocational Association will be held in San Jose Friday, and Saturday, August 1 and 2, 1930. This date was selected to coincide with the closing days of several summer sessions of California educational institutions, with the thought that the directors of these schools will excuse students from classes on Thursday and Friday in order to attend the conference.

Ideal Convention City

San Jose is ideally located geographically, being within a few hours of the Bay section, Sacramento and San Joaquin valleys, and a day's drive from Los Angeles and surrounding territory. It provides all of the facilities of a city for entertainment and accommodation for a convention of this size. There are several excellent hotels, theatres, restaurants, and shopping districts all within a few minutes' walk from the State Teachers College where the meetings will be held.

Strangers attending the conference will have an opportunity to visit such places of interest as Stanford University, eighteen miles north; Lick Observatory, a forty-

five-minute drive; Big Basin and the Big Trees, a ride of an hour or so; and Santa Cruz and its bathing beaches, thirty miles distant. Should one care to devote a day to a trip before or after the conference a drive to Carmel, Pebble Beach, and the Monterey Peninsula will be found to be most delightful and unique in every way. In the immediate vicinity of San Jose there are such interesting places as Alum Rock Park, Winchester Mystery House, swimming pools, a yacht harbor at Alviso, and several excellent golf links in close proximity open to all visitors during the conference.

Climate

The climate is naturally one of the most important items to be considered when selecting a meeting place for a conference. San Jose really can be proud of her summer climate. Situated as it is at the south of the San Francisco Bay, it receives each day a north wind of medium velocity, which keeps the day mild and refreshing, and the nights cool.

Meeting Place

All of the meetings will be held in the State Teachers College. Lecture rooms and halls will be assigned to the various sectional groups and the main assembly halls will be used for the general meetings. The general information committee will place traffic arrows to direct visitors to the location of all meetings and points of interest about the school and grounds. Also there will be arrows placed on all main highways leading into San Jose to direct autoists to the main building of the State Teachers College. Guides will meet all incoming trains Thursday and Friday mornings to direct visitors who use that mode of travel.

Exhibits

One of the outstanding features of the convention will be the exhibits. The entire corridor in the main building of the State Teachers College will be given over to booths for industrial and commercial exhibits. Practically every firm of importance on the Pacific Coast will have its products on display. Handsome prizes have been donated by several firms to the lucky winners who visit all these exhibits. These prizes will be drawn at the last general meeting of the convention.

This year the committee on exhibits is going to put over what is known as the "pet project exhibit." A large room with several attendants on hand at all hours will be given over to this scheme. The idea is that each visitor attending the conference will send or bring some outstanding project or idea that he or she has been teaching successfully or using in the school. This can be in the form of lesson sheets, charts, scheme for checking, or actually constructed problems. Even a description or photograph could be considered worth while displaying. In this way each member contributes some outstanding original idea and every person visiting the exhibits will be greatly benefited through this mutual exchange of ideas.

Commissioners to Attend

An arrangement has been made to have all state commissioners of special subjects in attendance during the two days of the convention and hold office hours at stated times at places to be designated later. This will give an opportunity to arrange for conferences with the commissioners to discuss individual problems.

Sectional Programs

Sectional meetings will be held by the eight groups: agricultural, commercial, rehabilitation, homemaking, industrial arts, continuation, and trades and industrial education, and vocational guidance. The tentative program for these meetings includes the organization of those groups that do not now have a state organization. Spirited conferences will be conducted by outstanding leaders at the sectional meetings.

Entertainments

This year the banquet will take place Friday evening, instead of the last day of the conference. An unusually excellent dinner is planned, followed by short addresses. Dr. Vierling Kersey, superintendent of public instruction, will be the main speaker, and a toastmaster who will keep things enlivened will have charge. Dancing will follow the dinner.

Luncheon will be served Friday noon on the college lawn by the home economics department of the San Jose State Teachers College. Several breakfasts have been planned by organizations at eight o'clock, Friday morning. Some groups that have already sent in their requests are: Stout Institute alumni, Iota Sigma Phi (I. A. alumni of San Jose State College), industrial arts directors and supervisors of large centers, and Santa Barbara industrial arts alumni.

A golf tournament for members of the association will be run off Friday afternoon, beginning at one o'clock sharp. The play is for a magnificent perpetual cup donated by a widely known machinery firm. Low net score will be winner. Be sure to have your handicap established and send in your entry early.

The last scheduled meeting of the convention ends Saturday noon. For those who wish to remain over Saturday night, Richard Werner is planning a swimming party at Santa Cruz and a barbecue at his ranch, La Glorieta Rancho, in the Santa Cruz Mountains, Saturday afternoon and evening. There will be an opportunity to visit the Big Trees, Limestone Caves, San Lorenzo Canyon, and Natural Bridge for those who do not care to go swimming.

Hotel Accommodations

A. R. Nichols, chairman of accommodations committee, will be glad to take care of hotel reservations for individuals or groups. The rates have been set for the convention and are: without bath, single—\$1.50 to \$2.00; double—\$2.00 to \$3.00; with bath—single—\$2.50 to \$3.50; double—\$3.50 to \$5.00. A list of good eating places may be had from the committee.

Committees

The chairmen of the following committees will make up the personnel of the Local Central Committee on Arrangements:

B. W. Spaulding, chairman, Local Central Committee, San Jose State College.

Accommodations Committee—A. R. Nichols, San Jose High School.

Exhibits Committee—Judson Aspinwall, San Jose State College.

Banquet Committee—Richard Werner, San Jose State College.

Golf Committee—Karl Hazeltine, San Jose State College.

Information Committee—H. A. Sotzin, San Jose State College.

Luncheon Committee—Helen Mignon, San Jose State College.

Publicity Committee—Doris Hoffman, San Jose State College.

Program Committee—Clarence Benz, Frick Junior High School, Oakland.

Transportation Committee—George Spearman, San Jose State College.

C. V. A. PROGRAM

Plans for the C. V. A. annual program are nearing completion. On Saturday afternoon, March 15, a meeting was held in San Jose where more definite plans were worked out for the annual meeting. The tentative program, as decided upon at that time, is as follows:

THURSDAY, JULY 31.

8:00 P.M. Executive council meeting at St. Claire Hotel. (The St. Claire Hotel will be the official headquarters of the convention.)

FRIDAY, AUGUST 1.

A.M.

8:00-9:30. Registration.

9:30-11:00. Sectional meetings for organizations.

11:00-12:00. General meeting. Miss G. Laurine Broadwell, presiding.
Address of welcome by President McQuarrie.

P.M.

12:30-1:30. Luncheon on the campus.

1:30-4:30. C. V. A. Golf Tournament.

Trips and entertainment: Stanford University, Lick Observatory, Big Trees, Winchester Mystery House, Agnews State Hospital, exhibits, etc.

4:30-6:00. Sectional conference meetings. Well-trained leaders will discuss specific problems.

7:00. Banquet. State Superintendent of Public Instruction Vierling Kersey, will give the address. Awarding of special prizes, followed by social dancing.

SATURDAY, AUGUST 2.

A.M.

7:30-9:00. Breakfast sections:
Oregon Agricultural College Alumni.
Stout Institute Alumni.
Directors and Supervisors.
San Jose State Teachers College Alumni (Iota Sigma Phi).
Santa Barbara State Teachers College Alumni.
Other organizations are planning breakfasts.

9:00-10:00. Visits to exhibits.

10:00-12:00. Election of officers and regular annual business meeting, followed by installation of officers and presentation of commercial prizes.

P.M.

12:30-1:30. Group luncheon at selected places.

2:00-5:00. Swimming at Santa Cruz or visits to San Lorenzo Canyon, Limestone Caves, Natural Bridge, Big Trees.

6:00. Barbecue and bonfire at La Glorieta Rancho. (R. J. Werner, manager.)

The members of the program committee are:

C. J. Benz, Oakland	Judson Aspinall, San Jose
H. A. Sotzin, San Jose	Helen L. Mignon, San Jose
B. W. Spaulding, San Jose	W. C. Patchett, Santa Rosa
R. J. Werner, San Jose	W. H. Van Dyke, Petaluma
R. E. Gilbert, Oakland	

For further information write to Dr. H. A. Sotzin, San Jose State Teachers College, San Jose.

BAY SECTION, C. V. A., AT STOCKTON

The Bay section, C. V. A., will meet May 17th at Stockton. According to the present plans the attendance from the Bay region will be large enough to warrant the chartering of one of the large river boats leaving San Francisco Friday evening, and returning Saturday evening. The California Navigation Company has made a special low rate for the trip.

Saturday morning, industrial plants and the shops at the Stockton High School will be visited by the delegation. The afternoon will be taken up with either general and sectional meetings, or a special boat trip through the Delta country to view the scene of the new deep-water channel which is under construction.

C. V. A. ALONG THE COAST

The Santa Barbara-Ventura Counties Vocational Association has had several successful meetings this year. The first fall meeting was held in Santa Maria, Saturday, October 26. At that time, the following new officers were installed:

President—Harry Snell, Santa Maria High School.
 Vice-President (northern district)—Wilbur Harkness, Santa Maria High School.
 Vice-President (southern district)—Arthur Cox, Ventura High School.
 Secretary-Treasurer—Francis Noel, Santa Barbara.

Aside from the business of the day, the main features of entertainment were a visit to the Hancock Aeronautical School and a luncheon at the Santa Maria Inn.

The next meeting of the association was held December 18, at Baylor Inn, Santa Barbara. The principal speaker at that meeting was Dr. J. R. Jewell, dean of the school of vocational education, Oregon State Agricultural College. Plans are now being made for a meeting at San Luis Obispo early in May.

The March meeting was held in Ventura High School, on Saturday, March 22. Benjamin E. Mallary, supervisors of classes for the training of trade and industrial teachers, led a discussion of cooperative training, in which many men participated.

James A. Woods, coordinator, Santa Barbara, explained the organization of the C. V. A., and urged attendance at the annual meeting in San Jose. Roy L. Soules, past president of the Santa Barbara-Ventura Counties Vocational Association, spoke on the activities of the local association.

After a discussion of the Capper-Reed Bill it was unanimously approved by the members present.

A. V. A. Convention At New Orleans

We gathered from every part of the United States on December 4 in that interesting and delightful city of New Orleans, for what is the greatest gathering of vocational educators and leaders held in this country—the annual convention of the American Vocational Association.

The spirit of the convention was reflected in the meetings where the attendance was excellent, the interest keen, with a surprising amount of enthusiasm. The visitors stayed in the hotel lobby and committee rooms, chatting informally between, after, and before sessions. In this way many contacts were made and much important information, quite off the program, was learned. In a city as alluring as New Orleans, this fact is a testimonial to the interest of the men in attendance. After all, probably the greatest benefit one obtains from such an experience is the opportunity to mingle with interesting people, hearing their ideas, hopes, and enthusiasms.

It would be impossible to report even the "high spots" of all the meetings and discussions so only a few things of special interest are mentioned. You doubtless noted with pride that California, with her fifteen delegates, was very well represented, as contrasted with attendance from other states. Only two states failed to send representatives.

It was particularly evident that, while the work, at least to a great degree, is planned and directed by the officers and their committees, its effectiveness depends upon the attitude and support of all. It is the great mass of us who are members, that make the work even possible. As individual groups working alone we cannot really effect anything in a large way. We must have a common organization that embraces all branches, if we are to survive and accomplish something of lasting importance.

I made a special effort to acquaint myself with the way in which the various states, affiliated with the A. V. A., are organized. Most of the larger states are divided into sections very similar to the present plan in California. In most cases the dues are paid directly to a state organization rather than to the secretary of the individual sections. In New Jersey, I was told, the extreme condition exists—each of the various branches of vocational education has its own state organization and each affiliates directly with the A. V. A., with no state connection whatever.

The fact that, even in these days of rapid development, the whole vocational idea in education is so new, seems so much more impressive after talking with men who have fought for it, even before its birth—indeed, that it might actually be born. Dr. Hobdy, director of vocational education in Alabama, is one of these men. From their stories, you realize vividly—what you have known from statistics—the immense growth of the idea all over the country, that there must be equal and unlimited educational opportunities for all individuals who care to take advantage of it. Most of this has been accomplished in the brief thirteen years since the Smith-Hughes Bill was passed.

In the House of Delegates, Paul Chapman, our new A. V. A. president (who, last year, was one of the committee-men appointed to persuade Congress to pass the

George-Reed Bill) told us of some of his experiences. He said several congressmen praised the committee for their hard and persistent efforts and, at the same time, assured them of the hopelessness of their mission. In spite of this discouragement they stayed right on the job and the bill was passed. Mr. Chapman said that throughout the states many individuals had written their respective congressmen, after the bill had been passed, telling them of their appreciation. This created a very friendly feeling in Congress toward our work. Several congressmen commenting on it pointed out that in most cases they were forgotten completely, once the bill they were advocating had been passed by Congress. By developing this friendly feeling it will be much easier to secure the passage of the new trades and industries cooperative bill, soon to be placed before Congress.

No account of the 1929 A. V. A. Convention would be complete without a word about the setting—New Orleans. We found there is more than talk in connection with the much-heralded "Southern hospitality." One finds it everywhere. Even the negro maids and porters seem anxious to make one feel comfortable. Those responsible for the hospitality shown us certainly deserve much credit. No description of mine could possibly do justice to the charm of the Old French Quarter. I am sure everyone enjoyed the Creole cooking—even the coffee after you were used to it.

I hope I have given you some idea of how much worth while it all was. I feel that the big thing I brought away with me was the feeling that our organization is going forward successfully, and that the American Vocational Association is promoting educational opportunities that are definitely contributing to the well-being and prosperity of the country.—W. C. PATCHETT, President, California Vocational Association.

What Management Desires*

I am to tell you of the qualities that the management desires to find in its employees, to assist you if possible in the development in the youth you are teaching. It is an old subject. About 180 B.C., an eloquent Hebrew discussed it; four hundred and fifty years ago Chaucer, in the earliest of English poetry, sang of it; and sixty years ago, Thomas Carlyle wrote about it. In modern days volumes have been written, whole college courses and innumerable correspondence-school courses deal with it.

Management must have good material to work with. The fundamental good qualities must be present in the worker to such a degree that they are capable of development. The opposite bad qualities must also be absent, for neither vocational training nor employment at a trade will, of themselves, eradicate dishonesty, malice, untruthfulness, cruelty, or sloth. We must have fallow ground in which to work. This ground should contain the elements of interest, loyalty, obedience, honesty, self-reliance, perseverance, industry, and zeal.

With good teaching, and employment under proper surroundings, among skilled artisans of good character, the youth or the new employee can be greatly developed.

* Remarks by Captain Fisher at the meeting of the Bay Section, California Vocational Association, at the Casa de Vallejo Hotel, Vallejo, California, March 1, 1930.

Good judgment develops from native intelligence and from observing experienced men. Skill is developed from awkwardness by practice and perseverance. Self-reliance is developed from the combination of skill and experience. Resourcefulness comes from thorough knowledge of the craft plus the ability to absorb all manner of information and store it away for future use. It is usually built largely on native ingenuity. Loyalty can be largely developed from intelligent trust.

All such qualities are valuable to any man. They are present to a considerable degree in most artisans. Of even greater value, however, are the qualities of initiative and leadership, which are like two brothers, and the possession of them marks their owner definitely for advancement and success. These two qualities are rare, and for that reason, as well as the fact that they have intrinsic value of their own, are the most valuable in any employee.

Young men being educated for a trade should not be deceived. The *sine qua non* is hard work, and I mean just that—hard work. Any teacher that permits a boy to select a trade because the boy thinks it is easier than some other trade is false to his trust. Some trades require more physical strength than others, and it would be foolish to advise a weakling to learn blacksmithing or boilermaking, of course, but the lighter trades such as patternmaking or electroplating require even more application and study. The sum total of the demands on mind and muscle is about the same in any case. Where more mental effort is needed, there is usually less physical exertion required and vice versa—and the total of both kinds of effort is invariably all the man has—provided, of course, he is desirous of being a good mechanic.

Also the working conditions should not be minimized. There should be accurate knowledge of the heat, confinement, noise, dirt, confusion, and discomfort to be expected. The rates of pay are usually well enough known to require no comment.

And that brings me to the kind of man any employer likes to see go to work. I have spoken of the traits of character, and have pointed out that many a dreary lecture or sermon has been delivered dealing with them. But there are certain very practical points that are usually left out. Remember we are discussing a man injected as a stranger into a rather "hard-boiled" organization, in the most highly competitive business in the world—that of earning a living. The man *must* make good.

Such a man, the prospective employee:

- Should keep his mouth shut and his ears open.
- Should read all rules and notices thoroughly himself.
- Should render instant unquestioning obedience to authority.
- Should be jealous of his rights, but manifest this jealousy with utmost care.
- Not be a busybody, but pick up all he can about what is going on.
- Not permit himself to be disturbed by the envy or horseplay of his mates.
- Always be cheerful, and be able to take hard punishment, both verbal and financial, for errors or violations of rules without losing his temper or becoming a grouch.

Do a little more than is demanded and do it better.
Be very chary about mixing up with restricted out-put—it cuts both ways.

Be prompt, punctual, and regular in attendance.

Learn that alcohol and work do not mix any better than alcohol and gasoline. Many seem to get away with it. But more fall.

Be neat—put things away. Be clean.

Be friendly, but not obtrusive.

Be self-reliant, but always ready to receive suggestions.

Realize that the organization *must* be maintained.

The average shopfull of men is not unlike a room of boys, swayed by evil mob spirit or by generous and noble impulses, in a bewildering combination that is as difficult to understand as it is fascinating to work with. A few leaders usually control it, and not always the rated men, either. It is of vital importance that this leadership be good, not evil. Crowds and shops are easily swayed, and usually more easily swayed in the wrong direction than in the right. It is therefore doubly necessary that men be capable of right reasoning.

Management wants men who are good citizens in the highest sense of the word. Homemakers, city builders, intelligent voters, men who are thrifty instead of extravagant, who pay their bills, who appreciate and illustrate the dignity of labor. The insidious propaganda of those who would overthrow our cherished institutions must be shown forth in its naked falsity. Wickedness and graft, on the one hand, are properly attacked; but the undermining of our body politic, built on the world's finest conception of the rights of man, is an attack that must be repulsed if we value our individuality, our homes, our communities, and our institutions.

Continuation Education, San Diego

San Diego was the host to about eighty members of the Continuation Education Association of Southern California on Saturday, April 5. No set speeches were scheduled for the meeting, but a list of problems for discussion were distributed. F. C. Weber of Los Angeles led the morning discussions on various phases of the new continuation education law. Superintendent Hepner of San Diego made, at the luncheon meeting, a most stimulating address.

The organization passed five resolutions.

Be it resolved:

1. That in connection with the 15-hour provision of the new Continuation Education Act it shall be understood that every unemployed boy or girl shall receive as many hours of instruction as possible and that in each individual situation the local school authorities shall apply the measure.

2. That an activity program for the unemployed continuation education pupils shall constitute the type of classroom work which will embody a definite procedure to cover both attitude building and vocational training in order to aid the youth in securing employment.

3. That the short unit lesson is considered the best aid in the realization of this activity program.

4. That this organization is highly appreciative for the services of Dr. Palmer in establishing a clearing house for short unit lessons and we earnestly urge the members of

this association to cooperate with Dr. Palmer in furthering this most worthwhile step in strengthening continuation education in California.

5. That this group heartily endorses House Bill 10821 appropriating \$3,000,000 (three million dollars) for encouraging vocational education as a supplement to the Smith-Hughes Act.

Financing Agricultural Projects

For ten years now, in Bakersfield, the following practice of making loans to boys engaging in agricultural projects has been used. After home conditions have been checked and it is found that a boy's location is suitable for carrying on the type of project he plans, the matter is discussed with his parents to see if they are willing for him to secure a loan. The boy is then taken to the bank of his choice, where he asks for a loan for an amount anywhere between \$25.00 and \$300.00 for a period of six months or a year, with the privilege of paying off any part whenever he is able, and of renewing the note when it comes due. The boy is the only person who signs the note. He opens a checking account, and it is the instructor's duty to pass on all checks to show that the money is spent for Boys' Club purposes only. This is for the protection of the school as well as of the bank. It is understood that whenever a boy sells any produce from his project the money is deposited to his account in the bank, and that he pays all bills by check. By this method, his checkbook keeps a good record of his finances. Some of the notes run over two and three years through the system of renewals, but usually the boy is able to pay off the entire loan by the end of the first year.

By this method over \$60,000.00 have been used in the last ten years by the boys in Bakersfield. Because the financial and sales ends of these loans are supervised closely, there have been only three cases in which the bank and the Ag Club lost money.

The Boys' Ag Club is a social and financial organization for all the boys in the agricultural department. Through it, the Calf Club boys buy their calves, the Poultry Club boys their poultry, and the Pig Club boys their hogs. It is a large organization that absorbs the smaller units. The club has officers, with a carefully selected treasurer, and the stenographer in the school office helps to keep the books. A cash book, in which all receipts are entered in duplicate, and a ledger book, in which each boy has a debit and credit account, are kept. All money for the club, as an organization, is deposited in the bank and paid out only by check, the checks being signed by the president and treasurer of the Ag Club and not by a faculty member. This organization does about \$20,000.00 worth of business yearly. This amount does not take into consideration the individual sales of boys made directly by them, or through the club, but only sales which are handled by the cooperative organization.

At different times it has been suggested that the boy's father sign the notes at the bank for individual amounts. Such a system has not been established because, in almost every case, when a boy's father has loaned him part of his money or has been very much interested in the boy's

loan he has tried to supervise the job, and the boy has become discouraged. It is a far better educational and safer financial practice to allow the boy to take all the responsibility with his honor as the only security offered.*—H. K. DICKSON, Bakersfield.

Cast System In Kingdom of Kluck†

I'll admit that I'm pretty hard-boiled right now, but as I am a Riverside brand selected fresh egg, I will tell you an interesting story of my career.

Here, in Southern California, where the finest eggs in the world are produced by scientific methods, I was packed along with 359 of my brothers and sisters in a spruce case. You know that spruce wood has a special advantage over other woods in preserving the flavor of eggs. A motor truck, equipped with pneumatic tires to prevent road shock to our delicate construction, rolled up and soon we were off to Riverside. I found out later that Whitehead Brothers use three of these trucks to gather their egg crop; each truck makes a trip daily so that the ranches can be reached twice a week.

Our case was unloaded on a gravity conveyor at the plant—gee, it was fun, sliding over those ball-bearing rollers—and we stopped at a scale to be weighed. My companions in the case ahead were labeled "30 doz. large eggs," but imagine their embarrassment when it was found that they didn't weigh the required 57 pounds, so every one of them had to be weighed separately.

Nothing like that in our case! Oscar Oven and some of his comrades had dirty faces. Now, Whitehead Brothers didn't like that so they marched my unclean friends down to the washing machine and tumbled them on to a spiral conveyor. This conveyor rolled my pals through a mysterious bath and when they emerged they were as bright as new dollars. But too bad, careless ones, too bad, a washed egg won't "keep." My poor friends had to be sold for immediate use.

The Kingdom of Kluck is truly a kingdom, for its inhabitants are of five castes or classes, depending upon their commercial value. Their grades are, first, the corpulent over-sized extras; the second, aristocratic large or "Extras"; third, medium or "Juniors"; fourth, small or "Peewees," and fifth, undersized or "Midgets."

Oliver Oversized and eleven others like him weighed more than 26 ounces! You'd think Oliver and his pals were of the aristocracy in the Kingdom of Kluck, wouldn't you? But no, an oversized egg represents an economic loss; Oliver himself was cracked. You see the cases are not built to carry these corpulent cluck-fruit, so Oliver's class was punished for its rotundity; they weren't allowed to see the world as the more fortunate of us were. This fate could have been avoided if only my greedy friends had practiced more girth control.

The real aristocracy of the Kingdom of Kluck is the "Extra" which weighs from 22 to 26 ounces per dozen. The pinnacle of perfection among these aristocrats is a

class all by itself, "Riverside Brand Selected Fresh." I achieved a position among these exalted individuals, as it was found that besides weighing exactly two ounces I possessed a beautiful balanced form; had a white, clean, hard shell and most important, showed very high interior quality. By high quality, I mean that when I was held up before a strong light or "candled" by Whitehead Brothers' expert crew of inspectors I showed a clean interior, small air cell and no cracks or flaws in my shell.

I was packed with Alex Extra and eleven other exalted eggs in—well, you saw the Riverside brand carton when you bought us yesterday, and we were off to see the world.

Pauline Pullet and eleven of her counterparts weighed between 19 and 22 ounces, but they equaled us in the same fine quality and hence were packed in much the same sort of a carton as ours, under the name of "Juniors." Peter Peewee and eleven others weighed between 16 and 19 ounces. They were not eligible to a Whitehead carton and were shipped in bulk. Samantha Small weighed as Peter did, but was less fortunate—she was taken to the "breaking room," ruthlessly slaughtered and "canned." Others, not even so large as Peter and Samantha, met a similar fate.

In the "breaking room" I have spoken of, all the cracked, undersized or surplus oversized ova had their poor yolks separated from their whites, were beaten mercilessly and frozen in cans to be used in cooking and baking.

In this Kingdom of Kluck your color is not held against you. Bertha Brown and her similarly shaded friends were handled with as much care as were we whites.

Well, that's my story—but you ask why eggs are held in cold storage?

You see, California's fine healthy hens produce three-quarters of their volume of eggs during the three spring months. If we were all thrown on the market at once you could obtain any number of us for about five cents a dozen; on the other hand, during the winter when these queens of the Kingdom of Kluck are on their vacation you would pay more than a dollar for twelve of us. By storing a part of us under scientifically proper refrigeration from spring to winter, you pay a more uniform price the year around. Both you and the owners of these fine flocks are benefited.

Whitehead Brothers store only the aristocracy—the same that they sell fresh as "Selected." Egbert Egg and his surplus friends were run through a patented dipping machine which sealed their pores with a fine, high-grade oil; then Egbert and his fellows, feeling very closed up, were placed in a thirty-dozen new spruce case and plunked to the refrigerator rooms. After their chilly sojourn for a few months, Egbert and his companions were removed and found to have retained all their original quality and goodness, and therefore were eligible to be packed in cartons labeled "Seald-Rite Extras" and "Seald-Rite Juniors" ready to be sold at prevailing market prices.

This is the end of my story. I am a fine egg, and I know you'll like me.

* From San Joaquin Valley Agriculture Teachers' Journal. December 7, 1929, p. 8.

† This article was written by Fred Gerbracht of the Perris High School Agricultural Department, with Vincent B. Claypool as instructor, after a field trip to an egg-packing plant.

Project Reports In Vocational Agriculture

A few of the records shown on some of the project reports received in the state office for last year's work indicate the economic as well as the educational value of the work. There are many interesting stories of outstanding individuals which will be written up in more detail at some future date.

Students in 22 high-school agricultural departments of the North Sacramento Valley region made a total labor income of \$41,000.58 on their farm projects during the last year. Out of 465 students who started projects there were 413 completed them, making an average income per student of \$99.03. Some of the most common types of projects were poultry, dairying, hogs, sheep, and field crops. Eighty-two boys made a total project income of \$7,509.91 on the production and raising of poultry. Eighty-two boys, with 202 animals, made a total project income of \$9,868.00 in dairy projects. Sixty-two boys, with 334 animals, made a total project income of \$2,986.49 in raising hogs. Thirty-five boys, with 906 animals, made a total project income of \$4,123.48 in raising sheep. Twenty-nine boys, with 107½ acres, made a total project income of \$1,953.93 on field crops. Nineteen boys, with 124 animals, made a total project income of \$2,454.62 in raising beef cattle. Many other projects were carried on by the students in this region.

In Chaffey Union High School at Ontario, 142 agricultural students completed their projects. Their total project labor income was \$21,226.73. Most of this money was made by 17 boys on their orchard projects.

Melvin Marsh of the Woodland High School, Woodland, raised 80 lambs from 90 crossbred Hampshire-Shropshire ewes and made a total project income of \$1,140.05; Alfred DuBois of the same school made a total project income of \$235.54 on 200 leghorn hens.

Seventy-one agricultural students of the Hemet High School made a total project income of \$5,694.16. A large proportion of this income was made by 21 boys with their poultry projects. They made a total project income of \$1,522.19. Keith Mauser, with 110 hens, made a total project income of \$163.46. Junior Taylor, with 277 hens, made a total project income of \$586.75. Russel Douglas, with 10 acres of alfalfa, made a total project income of \$529.23. Alfred Utigaard, with three dairy cows, made a total project income of \$399.22.

Fifty-three agricultural students of the Red Bluff High School, Red Bluff, made a total project income of \$3,261.84. Four boys of this high school, with 171 sheep, made a total project income of \$374.70. Two boys, with 137 hens, made a total project income of \$235.09. Four boys, with 533 turkeys, made a total project income of \$449.82. Nine boys, with 18 dairy cattle, made a total project income of \$409.64.—J. A. MCPHEE.

BOYS JOIN FUTURE FARMERS

Twenty-four boys of the Chico High School agricultural class were initiated into the Future Farmers of America recently when the Red Bluff team installed a local chapter at the high school, followed by a banquet in the upstairs hall and a basket-ball game in the gymnasium between the local chapter and the Los Molinos boys. Ninety-six boys, including those from Los Molinos,

Willows, Corning, Red Bluff, and Chico attended the affair.

The boys received the first of the four degrees of the organization—the green hand. The second degree is the junior farmer; the third, the California farmer, and the fourth degree, the American farmer. These are attained on an achievement basis.

Almond and peach blossoms and candlelight decorated the little theatre for the initiation and the banquet tables upstairs. Melvin Westlake, local president, acted as toastmaster at the dinner at which talks were heard from A. G. Rinn, regional supervisor of agriculture, Chico State Teachers College, Principal Sherman L. Brown, F. M. Porter, Frank Parker, and C. O. McCorkle, instructors of agriculture at Red Bluff High School. Ralph Filson was song leader and Miss Maradene McClure of Red Bluff was pianist during the dinner prepared and served by Miss Luella Hopton's home economics class. The Red Bluff boys entertained with special musical numbers during the dinner.—A. G. RINN.

Agricultural News Items

Oratorical Contest

On Tuesday evening, March 11, an oratorical contest was held at the Fresno State College to determine the boy best prepared to represent the Future Farmers of the San Joaquin Valley at the California Land Show held in Los Angeles March 14 and 15. The vocational agriculture students each gave a five-minute talk on "Reasons Why a Prospective Agriculturist Should Settle in the San Joaquin Valley." Boys from vocational agriculture departments of the Central, Madera, Kerman, Riverdale, Sanger, Modesto, Hanford, and Chowchilla High Schools participated.

Each of the eight boys gave a splendid presentation. The competition was so keen that the five judges were unable to determine the winner, so their decision awarded a tie for first place between Lloyd Logan of Hanford and Kenneth Bock of Modesto. Each boy received \$20.00 in cash and a free trip to the Land Show at Los Angeles where they made their talk on March 14. The third place was won by Dick Baldy of Madera, who received a prize of \$10.00.

This contest was sponsored by the Future Farmers chapters of the San Joaquin Valley and the Fresno Realty Board.

Farm Machinery Day at Hanford

In order to stimulate more interest in the farm mechanics work in the San Joaquin Valley, a farm machinery day was held near the Hanford High School on April 12. A series of demonstrations with tractors, milk separators, and various tillage implements were arranged through the courtesy of the International Harvester Company.

Future Farmers Chapters

There are twenty-three active chapters of the Future Farmers of America in the San Joaquin Valley.

Principals' Night

The regular April meeting of the agriculture teachers of the Fresno district was Principals' Night.—E. W. EVERETT.

Store and School Cooperate

The Oakland program of vocational education includes a course in cooperative retail-store training. The public schools are starting on the fourth year of giving this training. Only a few carefully selected students are admitted to the cooperative course each semester.

This plan of training combines a half-day experience in a store with a half-day classroom instruction. The store work is followed up by the instructor, and the classwork is directed in such a way as to help the young employee adjust himself successfully to employment. In this way the training is always up-to-date and can constantly meet the changing demands of business.

As carried on in Oakland the stores cooperate by giving employment to the students between the hours of eleven and two o'clock. That is the time of the day when they can use extra help, because their regular force is reduced at the lunch hours. The students attend classes from eight until ten, and again from two until three o'clock. The class in retail selling is designed to supplement the experience of the young people on the job, and to make them better workers than they could otherwise be.

The purpose of such training may be summed up as follows, to teach students:

1. How to get along with people most successfully, which includes lessons in courtesy, tactfulness, friendliness, etc.
2. The technique of selling and buying.
3. Store organization.
4. Business ethics.
5. "Buymanship," i.e., skill in personal and household buying.
6. How to find the job for which they are best fitted.
7. The value of money; budget of personal income.

Louis B. Travers, the director of adult and continuation education, has initiated the many cooperative training courses in Oakland.

SUMMER-SESSION COURSES FOR COMMERCIAL TEACHERS

The following courses given at the various summer sessions this summer will be of interest to commercial teachers, according to Dr. I. W. Kibby, chief, Bureau of Business Education, State Department of Education:

UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES

Present-day Problems in Industry and Commerce. Dr. HUNTER.
 Principles and Theory of International Trade. Dr. COLLINGS.
 Advanced Economic History of the United States. Dr. BOGART.
 Elements of Merchandising. Mr. NAGLEY.
 Salesmanship. Mr. NAGLEY.
 Resources of the Pacific Area. Mr. CARUS.
 Resources of California. Mr. CARUS.
 Curriculum and Methods in Secretarial Subjects. Mr. BULLOCK.
 The Organization and Administration of Commercial Education. Mr. BULLOCK.

UNIVERSITY OF CALIFORNIA AT LOS ANGELES

Industrial and Commercial History of Europe. Assistant Professor PEGRUM.
 Business Organization and Administration. Associate Professor NOBLE.
 Investments. Associate Professor NOBLE.
 Methods in Teaching Typewriting. Mrs. STUART.
 Demonstration Class in Teaching Typewriting. Mrs. STUART.

UNIVERSITY OF CALIFORNIA, BERKELEY

Industrial and Commercial History of Europe. Professor HEATON.
 Industrial and Commercial History of the United States. Professor HEATON.
 Elements of Accounting. Professor ELWELL.
 Marketing. Assistant Professor GREETHER.
 Elements of Money, Banking, and Foreign Exchange. Mr. MORGAN.
 Principles and Problems of Teaching Salesmanship. Professor LEE, Miss SMITH, and Assistants.
 Methods in Teaching Stenography. Mrs. FRICK.
 Demonstration Class in Teaching Stenography. Mrs. FRICK.
 Methods and Observations of Retail Selling. Professor LEE, Miss SMITH, Miss LINE, and Miss BURTON.

SAN JOSE STATE TEACHERS COLLEGE

Beginning Typewriting. Miss HOFFMAN.
 Beginning Accounting. Mr. KELLEY.
 Advanced Accounting. Mr. KELLEY.
 Junior Business Training Methods. Miss HOFFMAN.
 Senior Business Training Methods. Miss HOFFMAN.
 Typewriting Methods. Miss HOFFMAN.
 Shorthand Methods. Miss HOFFMAN.
 Methods of Teaching Accounting. Mr. KELLEY.
 The Teaching of Salesmanship. Miss INNES.

FRESNO STATE TEACHERS COLLEGE

Commercial Law.
 Personal Investments.
 Principles of Salesmanship.

Training for Waitresses

The latest course of training for girls provided by the Frank Wiggins Trade School is in waitress work. The course is given by the assistant manager and personnel director of one of the largest chains of restaurants in Los Angeles. As worked out for this year the course consists of eleven units as follows:

- Unit I. Personal factors.
- Unit II. Study of payroll jobs.
- Unit III. Table setting.
- Unit IV. Analysis of the menu.
- Unit V. Receiving guests and taking orders.
- Unit VI. Layout of the kitchen.
- Unit VII. Assembling the order in the kitchen.
- Unit VIII. Standards of service.
- Unit IX. Station duties.
- Unit X. Job ethics.
- Unit XI. Legal aspects of the occupation.

The course will require approximately three months with class work, demonstration, and practice in the restaurant. Courses of this type are a part of the Los Angeles program of providing further opportunities for women.

and girls to secure expert training for the occupation they wish to follow. G. Laurine Broadwell, assistant director of vocational education in Los Angeles, and Hazelle Moore, vice principal of the Frank Wiggins Trade School, are among the leaders in California in providing opportunities for trade training for girls.

ALUMNI ASSOCIATION HOLDS ANNUAL MEETING

The graduates of the course given for the training of trade and industrial teachers at the University of California at Los Angeles held their annual banquet at Hotel Green in Pasadena on March 22. As usual in this growing organization the meeting was well attended. Speakers on the program were Benjamin W. Johnson, supervisor of classes for the training of trade and industrial teachers, Los Angeles center; Hazelle Moore, vice principal, Frank Wiggins Trade School; Benjamin E. Mallary, supervisor of classes for the training of trade and industrial teachers, Berkeley center; and H. S. Upjohn, superintendent of schools, Los Angeles County.

During the year 1929-30 the officers of the organization were:

President—Roy H. Van Zile, Inglewood.
 Vice President—Mrs. Gussie Fralich, Pasadena.
 Secretary—Mrs. Margaret Aubin, Los Angeles.
 The newly elected officers for the year 1930-31 are:
 President—George MacKenzie, Los Angeles.
 Vice President—A. M. Edwards, Los Angeles.
 Secretary—Mrs. Ethel R. Joiner, Los Angeles.

The vice president is not a teacher, although a graduate of the course. The organization welcomes all former graduates who are interested in the trade training of boys and girls.—ROY H. VAN ZILE.

New Books

Prosser, C. A., and Bass, M. R. *Adult Education: The Evening Industrial School*. Century Company.

This book is a most timely and valuable contribution. The senior author needs no introduction. His collaborator, M. Reed Bass, is assistant director of the William Dunwoody Institute, in charge of evening and part-time schools. The general style and arrangement of the book is very much like the Prosser and Allen book, "Vocational Education in a Democracy."

The authors show a breadth of vision and no little sagacity in the title. Many vocational educators will realize for the first time that their work is a part of the adult education movement which has grown so rapidly in the last few years. The leaders in the adult education movement will appreciate that trade extension training raises problems, and demands an instructional technique distinct from the cultural phases of the movement. It should also be apparent that one cannot make a wholesale application in the adult field, of the traditional technique of instructing children and college youths.

Vocational directors, supervisors, and principals of evening schools will derive the greatest benefit from the book. They will find that it possesses a rare wholesome balance between theory and practice.

Certain parts of the book are well adapted to the training of evening trade extension teachers, but it would

probably be disastrous to hand the book over to these teachers with the casual suggestion to read it. This reviewer has selected the following chapters which he recommends for study by evening trade extension teachers, and in the following order: Chapters IV, XVI, XVII, IX, X, VIII, and XIII.

In the above listed chapters, the authors have the nucleus of a brief textbook for teachers of evening trade extension classes. No one is better qualified than they to follow up the present work with another written specifically for the teachers.—B. E. MALLARY.

NEWKIRK, LOUIS V., and STODDARD, GEORGE D. *The General Shop*. Manual Arts Press, 1929. Price, \$2.00.

L. V. Newkirk, head of the industrial arts department, University of Iowa High School, and Dr. G. D. Stoddard, associate professor of education and psychology, University of Iowa, have written a book primarily for "the shop teacher who is confronted daily with definite problems of organizing and teaching."

Less than 200 pages in length, the book covers practical considerations of organization and content, teaching devices, management devices, equipment, arrangement, and teaching. It also includes a discussion of tests and measurements in the general shop and delves into the intricacies of curriculum construction and teacher-training.

In the first chapter an administrative unit, the general shop is made the basis for consideration of a "trades exploratory" course, of a "home mechanics" course, of "farm mechanics," of "general woodwork," of "arts and crafts," and of "practical or community mechanics." The selection of the type of course is to rest upon the findings of a "community survey," upon the post-school activities of pupils, upon school facilities and opportunities, upon the type of teacher available, and upon the fact that modern society is becoming complex and requires interpretation. For each of those types of general shop typical content and organization of materials are noted, a section being given to the topic of "Practical mechanics for girls."

Chapters on teaching devices, management devices, and equipment include very practical suggestions.

The chapter on "Tests and measurements in the general shop," a high point in the book, brings to the reader, a simple, compact, succinct discussion of objective testing, its principles, test construction, and their application to the subject matter of the general shop. Sample tests are constructed and examples of standard tests are listed.

"Principles and technics in curriculum construction for the general shop" includes a discussion of the general principles of curriculum construction, an analysis of objectives and activities, and quotations from selected authorities in curriculum construction. The chapter offers pointed criticism of curricula and suggests aims and methods applicable to the junior high school particularly. However, the authors lay themselves open to severe criticism in this chapter. The fallacy of taking an administrative unit that is adaptable to the junior high school and applying it to the continuation school, to vocational schools, and to farm mechanics is sufficient to overshadow the value of the practical offerings of the preceding chapters. Confusion between the developmental needs of boys and girls in the junior high school, the occupational tryouts of the continuation and vocational students, and the training of

farm youth in the vocations of farming, destroys what value exists in the quotations from selected authorities. The authors, in their enthusiasm for the development of an administrative unit, have failed to see the tremendous differences that must exist in the conduct of these different types of courses, despite the fact that they may utilize vaguely similar equipment.

An administrative unit, the general shop, is utilized as a basis for the book, which is written primarily for the instructor on the job. As a source of information on teaching devices, management, equipment, arrangement, and other administrative problems, the "General Shop" should be a valuable addition to the instructor's or administrator's library.—DOUGLAS SAUNDERS.

WILLIAM S. RICE. *Block Printing*. Bruce Publishing Company, New York, 1929. Price, 88 cents.

"Block Printing" brings the old Japanese art within access of all schools, even those that have the least and most incomplete equipment. Mr. Rice presents the processes employed, and the results obtainable with every step, clearly and simply.

Block printing is a school problem that is full of interest and possibilities. It offers a practical application for the principles of art, thus correlating the art department with the other departments of the school, such as printing, school publications, domestic science, music, and dramatics.

Several full-page prints, some of the most famous created by Mr. Rice, who is an artist himself, are reproduced in "Block Printing." These prints will give students an idea of the unlimited possibilities of block prints, and at the same time set a high standard of workmanship as a goal. The illustrations also include some of the work of Mr. Rice's students.

STEELE, C. E., and MUENCH, G. W. *Applied Business Arithmetic. Unit Lesson Plan*. World Book Co., 1930.

Most teachers in continuation schools agree that the unit lesson plan provides the most satisfactory type of individual instruction in many subjects. Mathematics is a subject which lends itself well to this type of instruction and a number of "instruction pads" have appeared on the market. One of the most recent is "Applied Business Arithmetic" whose authors have been associated with continuation school work in Seattle. Some excellent lessons are to be found in this series of units and a number of lessons are on material which is within the common experience of many young people. There is, however, no single theme running through to give the lessons continuity and unity, and some problems are beyond the experience of boys and girls employed on their first jobs.

The pad of lessons is printed in very attractive type with an open inviting page. Actual business forms are used so far as possible and from the forty lessons provided the teacher should be able to select a series of lessons which deal with the type of work in which many pupils are engaged.—E. G. P.

DECKER, G. C. *Bows and Arrows for Boys*. Bruce, 1930. Price, 75 cents.

This is a well-worked out project for pupils in an industrial arts course—the making of the bow, bowstring, arrow, and accessories. In fact it might also interest girls.

COMING EVENTS

- Bay and Valley Sections, C. V. A., Stockton, May 17.
Continuation Education Association of Northern California, San Jose, May 24.
California Agriculture Teachers Association, San Jose, July 30 to August 2.
Annual Conference, C. V. A., San Jose, August 1-2.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
No. 16. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High-School Students. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

NEWS NOTES

- Vocational Education News Notes, volumes III-V, October, 1924-May, 1930.

CALIFORNIA VOCATIONAL NEWS NOTES



ISSUED NOVEMBER, FEBRUARY, AND MAY

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No. 1

Training Experienced Homemakers as Home-Economics Teachers

By MAUDE D. EVANS

Home Economics Department, University of California at Los Angeles

If men and women trained through experience in a trade make good trade teachers, then logically women experienced in homemaking should make good teachers of the arts of homemaking. Through the efforts and the cooperation of the state supervisor of teacher-training in home economics, and certain teacher-training centers in the state, such women are being trained as teachers of homemaking.

The legislature of California accepted the provisions and the benefits of the Smith-Hughes Act for vocational education, and the governor of the state approved the same, May 29, 1917. The Los Angeles State Normal, now the University of California at Los Angeles, and the other state normal schools, now state teachers colleges, authorized to train high-school teachers in household-arts subjects, were chosen by the State Department of Education as the institutions in which this training should be given in accordance with the regulations of the California State Plan for Vocational Education.

Through the efforts of the state supervisor of teacher-training in home economics, a two-year, instead of the usual four-year, curriculum was organized for experienced homemakers. In the fall of 1917, classes for carrying out this curriculum were begun in these institutions.

In the University of California at Los Angeles, last spring, 19 students were enrolled in the Smith-Hughes teacher-training course in home economics. This makes a total of 118 entrants at this institution since the organization of the course in 1917. For various reasons 42 students, or practically 36 per cent of the total, withdrew from the course prior to the completion of the requirements for graduation; three transferred to other courses on the campus or to other institutions; and 54, or approximately 46 per cent, completed the course.

Of the 118 applicants accepted into the course, only ten were native-born Californians. The majority came from other states in the union, while eight of the number came from outside the United States.

Of the total number of entrants 85 were married women who were experienced homemakers. The remaining 33 were single women who had been responsible for the management of homes for other people.

As a part of the entrance requirements each candidate is required to give proof of an experience of four years of

homemaking after the age of eighteen; therefore the minimum age at entrance is twenty-two years. The average age of this group at the time of entrance was 33 years. All candidates accepted into the course are required to be high-school graduates or are to have had the equivalent of that requirement. Almost all of the candidates had had some advanced training in education, and 40 per cent of them had taught in elementary schools. Their business experiences were many and of a wide variety.



CONTINUATION EDUCATION EXHIBIT, CALIFORNIA STATE FAIR, 1930

Most of the women in this group entered the University because they felt the need of further education. They chose the Smith-Hughes course for three reasons: first, being homemakers, they were vitally interested in the various phases of homemaking included in the course; second, time being a vital factor with them, the possibility of completing the course in two years was a decided advantage; third, the fact that a secondary credential in homemaking is issued to them at the completion of the course and they are thus afforded the privilege of teaching in the secondary schools of the state, made its appeal.

The problem of performing the duties of a homemaker and carrying a regulation university program at the same time, proved to be one difficult of solution. It was solved,

however, by various methods depending upon the situation of the individual. In some homes, the fathers assumed extra responsibilities. In others, many tasks previously performed by the mother were divided among the various children of the family. In some instances, friends or relatives were brought into the household to help. Labor-saving devices were installed in many homes and, in most households, life was simplified to such an extent that only the minimum of energy was required to perform the routine tasks of housekeeping. Fewer social functions were indulged in and the families, generally, set about giving the mother the opportunity to spend her time preparing for her educational advancement.

As a result of this training these women report that they are much better off financially and are more satisfied with their daily accomplishment. This is true even of those who are confining their entire time to homemaking. The added finances have made it possible for the family to educate the children, provide for them musical training as well as college training, and to bring into the home books and magazines which the family otherwise could not have had.

To some it has given a keener grasp of their situation and they feel that through it they have gained a better sense of values, they are more capable of weighing their problems and making decisions in favor of those factors of life which are really worthwhile. Many of the women feel that the completion of the course has brought them to a greater sense of their responsibility to the community in which they live, and to mankind in general. It has made them much more unselfish, in their attitude, and has removed the feeling that one is justified in centering all her thoughts on herself and her immediate family. Community service takes on a new meaning. "The realization that I must justify to myself, and to the state, the money, time, and energy expended in the completion of this course, has given me the feeling of need for larger accomplishments," is the testimony of one student.

As a result of having taken the courses in food, nutrition, and dietetics, they feel they are able to prepare scientifically and dietetically adequate meals for a maximum number at a minimum cost. They can be of service to others by lending aid in planning meals for both children and adults. They also are equipped with the credential as well as with the information which makes it possible for them to hold teaching positions in the home-economics departments of the schools. As a part of their daily contribution in this capacity many of them are managing the school cafeterias and thus giving the pupils and the community at large the benefit of their excellent training in selection, preparation, and service of food. From the standpoint of clothing, they are confident they are better judges of wearing apparel and so feel that they get the maximum value of their money through their purchases. From the standpoint of social relationships the gains appear most extensive. Through a gain in confidence in their own ability they are able to entertain their friends with ease and at less expenditure of money than formerly. They are able to analyze what one's reactions are likely to be under a given set of circumstances and are therefore more competent to judge the reasons for certain types of behavior. In school, and in social service work, at home and in public, this is a great asset.

As to the post activities of this group there is much to report. From the information at hand it would be impossible to give a detailed account of each individual, but only a short resumé of the group as a whole is presented.

Of the 54 graduates, one continued her university training and received the Bachelor of Education degree last June. She made the sixth of the group to complete the requirements for the Bachelor's degree. Another not only is continuing in the University to work toward a degree, but is also teaching home economics in a private school at the same time. Head dietitian in a hospital is the position being filled by one of the group. One is operating a millinery shop and another is manager of a commercial dressmaking school. One is acting in the capacity of a welfare worker in Los Angeles County and another is a county demonstration agent in the middle west. Seven are devoting their efforts principally to the business of homemaking. Forty, or 75 per cent, are teaching. Of those who are teaching, one is on the home-economics staff at the University of California at Los Angeles. One, as mentioned above, is teaching home economics in a private school for girls. For several years one woman has proved herself a worthy member of the staff of the continuation school of Los Angeles. Of the 40 who are teaching, practically 50 per cent are holding positions in senior or junior high schools; the remainder in elementary schools.

The Smith-Hughes course has proven a great boon to these women and, as a consequence of the opportunities afforded by it in educational advantages, they have been relieved of financial stress in many instances, by earning their livelihood in a way most satisfying to themselves, individually, they also are giving much to the pupils who are fortunate enough to come under their supervision, thus serving the community in which they live.

As a further justification for the existence of the Smith-Hughes course let us quote from Senator Hoke Smith who, in a way, is responsible for the existence of the Smith-Hughes course. "Money intelligently spent in training people to do better and more productive work is the one investment bound to earn ten-fold and even a hundred-fold," says Senator Smith, adding, "It produces wealth. We should make our people realize that education begins at the cradle and should not stop until the individual reaches the grave. The desire to improve and the facility and incentive steadily to better that which we do, bring a satisfaction and a compensation that no product of idleness or inefficiency, however gilded by wealth or luxury, can give."

ALLEN, EDITH L. *American housing*. Manual Arts Press, Peoria, Illinois, 1930. Price, \$2.00.

The author has succeeded in developing an interest in the background of our present-day housing habits; the book explains those things about which one frequently questions—or wonders—concerning the reasons for our current fashions in building and living. The language is simple and the style direct so that the average high-school pupil could read the text rapidly and with pleasure. I consider the material very valuable for reference work contributing to individual problems. Any teacher who wishes material on the history of housing should include this book in her list.—JUANITA L. GERLACH.

Craftsmanship and Crime

By BENJAMIN W. JOHNSON

Assistant Director, Division Vocational Education, University of California at Los Angeles

Vocational education is usually thought to be training in skills required in a specific occupation; training in acquiring the knowledge and information that relate to and are an integral part of these skills; and training in the trade judgment necessary to use these skills and this knowledge efficiently in any situation. There is another most important factor too little thought of—that of trade ethics or morale. Although accepted as a matter of course by all trade teachers, it is assumed that the beginner in the trade will learn this essential factor by example or association on the "pick-up plan" rather than through careful and skillful teaching.

The writer has been led to formulate a statement of the fundamental importance of character training through a recent visit to San Quentin prison. The occasion was a graduation program for some 650 inmates who had completed various short-unit courses conducted by the educational department of the prison. It is most significant that the state of California recognizes that a prison is not chiefly for punishment, regardless of how much the crime committed may seem to justify punishment and retribution; nor is it solely for the protection of society from the criminal class, if there is such a class, by isolating them from society. Most of the inmates sooner or later will return to society, with nearly every influence past and present forcing them back into ways of crime. Protection will be best secured by building up the personality and the character of those who, through any cause, get out of adjustment with wholesome and sane living becoming thereby a menace to themselves and to others, so that they may seek to control themselves for their own good and for that of society.

The educational work at San Quentin seems to have this objective. It was started some three or four years ago under Mr. Earl M. Steiger. Mr. H. A. Shuder, the present director, has been developing the program since last April, when he first entered upon this directorship. He has at present a staff of about 70 instructors, all inmates, most of whom are college graduates who are highly competent in their various fields. The graduates from this department have completed courses from the elementary grades to college. They are numbered as follows: elementary division, 106; commercial division, 56; industrial, 335; agricultural, 60; and language, 100. About 70 per cent of the courses are vocational. The importance and success of this work has secured for it hearty support of the prison board. A three-story building has been planned to house the educational work, and construction has already begun.

Oddly enough, I happened to read in a Sunday paper some days previous to my visit an account of this educational enterprise that challenged my attention. "Why education in a penitentiary?" I asked, adding, "And, why not?" as I further considered the question. What is the aim of education outside the prison walls? In the vocational field we continually stress the need and advantages of more skills and knowledge, with keener intelligence to meet the rapidly changing industrial conditions.

Why not have the same objectives for the vocational training within the prison walls? Is it a safe procedure? Do we want criminals made more skillful with wider knowledge of the various crafts; with keener intelligence to deal with economic and industrial problems? Certainly not if they still keep their criminal tendencies and, consequently, use these advantages so gained to prey further upon society. What is the difference between the locksmith and the thief who can pick the lock or open the safe? Both have keen intelligence, skill of hand, and thorough knowledge of locking mechanisms. The locksmith, however, has something of vast importance for his own welfare and that of society which the thief lacks.

Character the Basic Objective of Education

Education in a democracy, whether for the inmate in the prison or for his more fortunate brother outside its walls, can have but one basic objective, and that must be sound character—the right ideals, with training in those habits that make for honest work well done. Trade ethics and high craft morale cannot be omitted nor given chance consideration in our vocational-training objectives, in our detailed plans and lessons, and in our methods for teaching trade proficiency. Since the educational work in the penitentiary, if it is justified at all, must give positive assurance that it is making men safer to return to society, and better able to live up to ethical standards that make for sound progress, is there any less obligation upon our educational work, outside the prison, to give positive assurance that those who receive it are better able to live up to similar ethical standards?

It is evident within the last two or three years that those responsible for vocational training are becoming aware of a greater obligation. Recent studies show that 60 per cent of some 5000 who lost their jobs last year in an industrial group, lost them not because they lacked skill, knowledge, or trade judgment, but because they lacked certain elements of character—moral stability, or emotional control. Given the intelligence quotient and the corresponding mastery of skills and abilities, it is possible to determine roughly in what level of employment an individual should succeed; but how well he will succeed and in what way is dependent upon other factors that make for character and better social adjustment.

In the training courses for vocational teachers increasing attention is being given to the problem of *trade ethics*. In our trade analyses and in the set-up for curricula analyses and courses of training, specific instances are given in teaching trade ethics. Our standard to be taught as a part of every job is: "So do your work that others may do their work better."

Management Recognizes the Human Factor

There is also evidence that labor and industry are becoming increasingly sensitive to the importance of human relationships rightly maintained. Man is something more than a machine to be bribed by a wage to do work that becomes degrading because of long hours and

unfavorable working conditions. The "welfare movement" of several years ago was the evidence of a new attitude. This term "welfare" is no longer acceptable. The humanistic need in every enterprise cannot be satisfied by contributions from an opulent employer to his employees. It now involves a sharing—a democratic concept of partnership—each contributing to the greater good of all and aware of such cooperative responsibility.

Further evidence of this point of view is given by Dr. Walter Dill Scott, an expert in personnel management, who uses, as the industrial unit for determining the efficiency of an industry, not a work job alone but the "worker in his work" unit. There can be no job without the worker, and each job is what the worker makes of it. Every job should offer the worker a satisfying interest; it should be within his capacity to do well, and offer him an opportunity for growth and development. Work, then, must be done not only with skill, knowledge and judgment, but also with honesty, and with full consideration of its human significance and consequences.

Good Craftsmanship Includes Self-mastery

Someone wisely made this statement: "Good craftsmanship, by the faith it inspires, is the foundation of the world." In the training of vocational teachers we also emphasize the sound ethics of this statement. It is most significant. You and I stake our lives every moment of the day upon this faith. You drive your car forty miles an hour, secure in the faith that the craftsmanship built into your car is to be depended upon, and that you will reach your destination safely. Somewhat less than 5 per cent of our accidents are attributable to mechanical defects. Even here craftsmanship is not at fault; rather is it the careless or ignorant driver who attempts to use a machine beyond the limit set by the craftsman who built it. Good craftsmanship is also reactive. It inspires the faith of the craftsman in himself. It contributes to his self-respect, to his sense of mastery, and to his power to control himself as well as the tools and materials of his craft.

As a part of the program for the graduation to which reference has already been made, Dr. Herman M. Adler, former state criminologist of Illinois, and now with the State and the University of California, spoke briefly. His remarks are so illuminating and appropriate to the theme of this article that they are summarized here.

Psychologists, he stated, now accept as a fact that many individuals have, in a sense, a divided personality. In some it is sharply marked. At times they express characteristics that, on other occasions, are subordinated. We all have experiences and do things that cause us to wonder afterwards why and how we did them. These are illustrations of a personality that is not unified and may be out of harmony with itself. The Bible has a text quoted many times by men of many faiths that describes this situation and its consequences: "A house divided against itself cannot stand." Your personality should act as a unit, with clear understanding of the significance of the experiences you encounter. We must know why we behave as we do. We must understand the significance of what we do and be able to see the relations of our actions to situations as a whole. These are evidences of an intelligent man with a well-balanced personality. Now, experience has shown in dealing with a personality, "divided

against itself," that the best means for securing a unified personality—a harmonious, intelligent human being—is work.

Work seems to bring to the individual the best opportunity for the exercise of his powers and the expression of his personality. It makes possible the unifying of all his energies through giving an objective worthy of his best effort. A recent magazine article stated: "Work is the normal condition of humanity. We cannot be happy without it; we cannot be good without it; we cannot live without it. Thinking men know that work is the salvation of the race morally, physically, socially. Work does more than get us our living; it gets us our life." Work, then, if it is to have these values, must be worth doing and must give the satisfaction of good craftsmanship. It is the training for work, the ideals of good craftsmanship should be taught with the acquisition of skill, knowledge, and judgment. Education is thus built upon a foundation of skill, knowledge, judgment, and ethical ideals. These make for a "united house" that will endure. "Good craftsmanship, by the faith it inspires, is the foundation of the world."

BOOK NOTES

MATHEWSON, F. E., and STEWART, J. L. *Notes for mechanical drawing*. (Revised edition.) 104 p. Bruce Publishing Company, 1929. Price, \$1.48.

This book covers a general group of problems suitable for a beginning course in machine drafting. Commencing with fundamental principles of projection it includes the general principles of drawing and some advanced machine drawing problems.

The richness of the subject matter, the thoroughness with which the large variety of understandable learning units are combined with the necessary auxiliary information, and the brief explanatory notes supplemented with the necessary reference charts make this book a reliable and interesting text for beginners in machine drafting.—W. E. DUNKUM.

DEVETTE, W. A. *Short course in mechanical drawing*. Bruce Publishing Company, 1929. 141 p. Price, \$1.36.

This book is particularly adapted to students of machine drafting who have, as a base, a general knowledge of mechanical drawing but who wish to become more proficient in the field of drawing adapted to machine shop or subjects related to machine shop. The problems selected for the text are of true vocational nature and are unusually representative of drafting-room practice.

I would consider this book a very valuable asset to a course having as its objective the training of a student to fill a job as machine draftsman.—W. E. DUNKUM.

PETERSEN, L. C. *101 Metal-working projects*. Bruce, 1930.

The author has attempted to embody in one book information about sheet-metal work, bench-metal work, and machine-shop work for students in secondary, continuation, and vocational schools. A number of the projects have operation sheets to go with the explanation of tools and equipment used by the metal worker and the machinist. The book contains a great deal of practical and helpful materials.—JOHN J. FRICK.

Apprenticeship in Women's Trades*

By CLARICE D. ZION

Secretary, State Industrial Welfare Commission

Great strides made in vocational education in the last decade have brought this work very close to that of the State Industrial Welfare Commission in most of the women-employing industries. This has been particularly true in the last few years because of the cooperation the Commission has had from the various agencies in the educational system.

A large percentage of female apprentices in the trades in this state are girls between the ages of 18 and 21 years, and to secure minimum wage protection for this large group, the Industrial Welfare Commission drafted a bill to amend the Act under which it operates by raising the age of female minors from 18 to 21 years. This amendment was passed by the last legislature. If minimum wage for adult women is ever declared unconstitutional in California, as it was in the District of Columbia in 1923, the Commission will still have unquestioned power to protect the wages of the large group of so-called "minors" under 21 years of age, and the wage which may be set for this group will have a direct effect upon the wages of adult women.

The Commission has provided for wages below the minimum wage which may be paid to apprentices, permitting them to enter industry, on the theory that they are being taught a trade under supervision. The length of the apprenticeship period varies with the wage opportunities after the learner has become an experienced worker—the larger the future wage possibility, the longer the apprenticeship period.

In the mercantile industry, where a thorough apprenticeship may lead to the position of assistant buyer or buyer, the period is long—two years for a minor under 18 years, and one year for a woman 18 years or over. The next in length is the office apprenticeship, with one year for those under 18 years, and six months for those 18 and over. There is a six months' apprenticeship in factories for both minors and adults, three weeks in unskilled occupations, two weeks in canneries, fruit packing, nut cracking and sorting, and no apprenticeship period in hotels and restaurants. The majority of women and minors employed in the last-named industries receive very little, if any, more than the minimum wage of \$16.00 a week. Waitresses are an exception, as tips and meals generally bring their wages to more than the minimum.

In October each year the Commission calls for payroll reports to be filed in full by all firms employing women and minors in stores, factories, and laundry and dry-cleaning plants. In October, 1929, the hours and wages of over 100,000 women and minors in 9,200 establishments in these three major women-employing industries were checked. The largest number employed are of course in stores, with 47,000 women and minors employed in the 5,400 stores reporting. The factories come next with 36,000 women and minors in 2,622 plants; and laundries and dry-cleaning establishments employed 16,500 women and minors in 1,156 plants.

* Address given at the August meeting of the California Vocational Federation, San Jose, 1930.

The field of the longer apprenticeships in stores and offices is already being splendidly covered by vocational training in the public schools. The following trades employing many women and minors have a six months' apprenticeship under the Manufacturing Order of the Industrial Welfare Commission: candy making and chocolate-dipping, knit goods, printing and bookbinding, paper-box making, and fur working. Pressing and spotting in dry-cleaning establishments yield good wages and have a three months' apprenticeship under the Laundry and Dry Cleaning Order. These might also be considered for public-school training.

The Industrial Welfare Commission has always welcomed the cooperation of the schools in helping to solve its apprenticeship problems. As early as 1915, the Commission brought Meyer Bloomfield to California to make a study of the possibilities of tying up the apprenticeship regulations of the Commission with the public-school system. It is only in recent years, practically since the coming of Dr. Nicholas Ricciardi, chief of the Division of Secondary Schools, that we have had close cooperation with the Vocational Education Division of the State Department of Education. Prior to that time, there was some cooperation between the Los Angeles public-school system and the Commission, where they have cooperative classes in salesmanship and some of the mechanical trades for boys. Oakland, also, has gone quite a distance in cooperating with this Division, both in their cooperative school work and their part-time work. Their students are reported monthly to this Division.

In Los Angeles we have found that the training given in the Frank Wiggins Trade School in cosmetology, dress-making, and power-machine operation has fitted women to enter industry in many instances not as apprentices but as minimum wage workers. It has been our experience that some of the courses given in the vocational schools have not really fitted young people for trade work—for instance, millinery courses. Although the work may be valuable in teaching young women to make hats for their own use, we have found employers not enthusiastic about the commercial value of these courses. Schools must distinguish between training for home use and training for commercial use.

The Industrial Welfare Commission, in its Mercantile and Manufacturing Orders, provides that "An employer may employ students attending accredited vocation, continuation, or cooperative schools at part-time work on special permits from the Commission at rates determined by the Commission." These rates have been fixed as follows for both the salesmanship courses and certain of the mechanical trades where minor boys are employed:

Twenty-five cents an hour for the first semester.

Thirty cents an hour for the second semester.

After this period the student must receive not less than 33⅓ cents an hour.

This is higher than the regular apprenticeship wage for full-time workers, the reason being that these young people are working under coordinators who are watching

their work, and we feel that they are giving much better service to their employers than the ordinary apprentice who comes in without any knowledge of the work. We have known of no employer who refused to pay these wages for cooperative students.

There have been times when the Industrial Welfare Commission has not always agreed with the school authori-

ties as to what was proper vocational training, and at times the school people have rather resented what they considered interference in their own field, but we have been most fortunate in having our obligations to the industrial world interpreted to the school people by Dr. Ricciardi, who has shown great sympathy and understanding of the work of this Division.

Significant Contributions of Vocational Education

By NICHOLAS RICCIARDI

Federal-and-state-aided vocational classes have been maintained in California for a period of thirteen years, 1917-18 to 1929-30, inclusive. For that period there is recorded the remarkable increase of 1622 per cent in the enrollment of federal-and-state-aided vocational classes for minors (exclusive of continuation education enrollment) and the increase of 4031 per cent in the enrollment of federal-and-state-aided adult vocational classes. There has been an increase in the total reimbursement of 1756 per cent.

Despite the increase in 1929-30 in funds available for the support of home economics and agriculture it has been impossible to pay in full all of the claims received from the schools maintaining vocational classes in strict accordance with the provisions of the California State Plan. This year the claims submitted exceed by nearly \$100,000 the funds available for reimbursement.

During that period, the growth in the federal-and-state-aided vocational education program has been practically twenty times greater than the growth in the regular high-school program, and more than twice as great as the growth of the non-federal-and-state-aided special adult program.

Significant Contribution of Vocational Education

The most encouraging and gratifying index of growth in vocational education is the changed attitude towards secondary education of the high-school principals, of the superintendents of schools, of the junior-college heads, of higher institutions of learning including the State University.

In 1917, practically every high-school principal sincerely doubted whether vocational-education classes could be successfully maintained in high schools. Today it is the exceptional principal who does not definitely recognize that the major responsibility of the high schools is to make available an effective program of vocational education to the boys and girls who are planning to fit themselves for specific occupations which require training of a character different from the collegiate preparation which fits young people for advantageous entrance to higher institutions of learning. This important change in attitude is the most significant contribution of vocational education to secondary education.

High-school principals now clearly realize that collegiate courses which constitute adequate preparation for college do not, at the same time, fit young people for useful employment in specific occupations. They know very definitely that the high school of today, because of the varied interests, needs, and abilities of the young people

enrolled, has a distinct and vital dual responsibility—to be discharged through effective collegiate courses in cordial cooperating relationships with the State University, and the other to be discharged through effective vocational education in cordial cooperating relationships with industry and with labor. One is a vital responsibility to higher institutions of learning and the other is a vital responsibility to the community or area which the high school serves.

The Vocational Major

The revision of the rules of the State Board of Education recognizing for graduation from a California high school a major in vocational work is the specific outgrowth of the changed attitude of high-school principals toward secondary education. The secondary schools are availing themselves more and more of the vocational major. This major and the provision for unrestricted electives in the new college-entrance requirements of the State University make possible the working out of high-school courses of study suited to the varied needs of the different types of high school pupils.

The general practice now is to measure the efficiency of the high school by the rating which it is given by the State University. It should be understood that the University is not responsible for this practice; it is largely the result of the lay mind which interprets the State University rating as the index of the efficiency of the whole high-school program. Since the University rating is an index only of the quality of the college preparatory work, the lay mind should be educated to realize clearly that the efficiency of the service rendered by any high school should be measured not only by the success of its graduates in higher institutions of learning, but also by the success of its graduates and non-graduates in the social, cultural, and occupational life of the community which the high-school serves. This can be done by the State University and the State Department of Education cooperating in establishing acceptable standards for measuring the efficiency of the high school, since to do so would help the high-school principals very decidedly in successfully carrying into effect the expanded concept of secondary education with its dual responsibility.

The extent to which such broadened concept of secondary education is being carried out in California may be learned from a careful perusal of past biennial reports and of the full report for the last biennium. The last biennial report suggests a practicable procedure for measuring the efficiency of the high-school program in terms of its responsibility to higher institutions of learning and to industry and labor.

Continuation Schools Exhibit at State Fair

Sweepstakes prizes in the exhibit of work by continuation schools of the state were won by Watsonville, first, San Jose, second, and Berkeley, third. The Watsonville Continuation School had a most varied exhibit, including woven and hook rugs, new and remodeled dresses and coats, hand-blocked smock, pillows, purses, hats, doilies, baskets, tooled leather, small cedar chest, jellies, jams, canned vegetables, and bookkeeping sets. First prizes were received for:

- One hand-woven purse and handkerchief.
- One tooled leather purse and belt.
- One sport hat.
- One tailored coat (adult).
- One fancy pillow.
- One afternoon dress.

Second prizes were given for:

- One coat (adult).
- One remodeled garment (child's coat).
- One evening dress.
- One bookkeeping set.

San Jose exhibited a number of hand-woven articles, a hooked rug, a child's dress, a fernery, a plastic-work picture and samples of business letters. They were awarded prizes as follows:

- First prize—Hooked rug.
- Second prize—Plastic-art picture.
- Third prize—Child's dress.

The Berkeley Continuation High School won the following prizes:

- First prize—Bookkeeping set, evening hat, sport dress.
- Second prize—Woven bag, hooked rug.

Other articles exhibited by Berkeley pupils were: dresses for adults and children, rugs, crocheted afghans, reed tray and wood basket, pillow, quilt, hand-woven runner, science project, fernery, and photographs of the work in progress in the school.

Santa Rosa Continuation School won three prizes. A smock made of an India print took first prize, another smock of the same material and a pajama suit, each took second prize.

The E. R. Snyder Continuation School of Fresno did not compete in the exhibit but entered a unit of material which attracted a great deal of interest. All the necessary clothing and equipment for a baby were included. A chest of drawers contained the clothing, thermometer and all bathing accessories, a basinette with a life-size baby doll, and a baby bath-tub completed the unit.

San Francisco also did not compete but, using the bay bridge as its theme, sent a huge poster showing continuation education bridging the gap between school and work.

The Alameda Continuation School took its theme from the airport, of which that city is justly proud, and exhibited two miniature scale model planes, one being a hydroplane. A picture of the exhibit is shown on the cover page of the *News Notes*.

The Sacramento Continuation High School presented live exhibits. Students from the school demonstrated the teletype (loaned by the Postal Telegraph Company), the comptometer, the stenotype, the sewing machine, and the electrical test bench; and as a last attraction girls distributed ice-box cookies with a copy of the recipe used. Teachers from the Sacramento Continuation School were

on duty morning, afternoon, and evening to supervise the exhibit. Too much credit cannot be given to the committee who arranged for the exhibit and to Mr. J. E. Carpenter, principal of the Sacramento Continuation School, and his staff for making this first state fair exhibit a success.

NEW LAW AFFECTS ATTENDANCE

The initiation of the application of the new provisions of the continuation education law seems to be entirely satisfactory judging from the answers to a questionnaire received from a number of the larger schools in Northern California. The directors of these schools were asked to express their opinion concerning the following questions: The effect of the new law on:

- a. Continuation High School enrollment.
- b. Continuation High School attendance.
- c. Full-time high school attendance.
- d. Attitude of affected pupils.
- e. Attitude of their parents.
- f. Continuation High School organization.
- g. Content of instruction.
- h. Instructional methods.

The reports from the different schools are very uniform and indicate that:

- a. Continuation High School enrollment has been decreased about 20 per cent.
- b. Daily attendance at Continuation High School has been slightly increased.
- c. Attendance at full-time high school classes has been definitely increased.
- d. The attitude of affected pupils, that is those required to attend daily, has been very satisfactory. They take the new requirement as a "matter of course."
- e. The attitude of parents, and other citizens, has been highly satisfactory, some schools reporting that these people "like the new law better," while a few parents "want their daughters to stay at home."
- f. Some increase in the problems of the Continuation Schools has been noticeable, especially the problem of checking up on attendance, and on employment and placement needs.
- g. The schools reporting indicate that an improved quality of training content will be possible under the new provisions.
- h. All schools were carrying on their instruction by methods which have been adapted without difficulty to the new situation.—J. E. CARPENTER.

Employment for Minors

Young people trained in the schools of the state are being placed by their schools as a regular function of public education. The last legislature made such a service obligatory in every high-school district in the state and last year, for the first time, a record of such placements was requested of the continuation schools. The records from only 27 such schools represented showed a total of nearly 10,000 boys and girls placed during the year 1929-30. There were 5474 boys and 4098 girls or a total of 9572. These figures are evidence of the fact that continuation education helps pupils to secure employment.

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TO MILWAUKEE!

Plans are developing rapidly for the A. V. A. Convention, December 10-13, in Milwaukee, Wisconsin. This is a time of reunion and although it is only the fifth anniversary of the A. V. A. twenty-five years have passed since the founding of its earliest predecessor, The National Society for the Promotion of Industrial Education, and twenty years since the visit of Dr. Georg Kerchensteiner of Munich who created such interest in continuation education that Wisconsin established its remarkable system of continuation schools the following year.

It is hoped that many of the distinguished men and women who helped to form the first organization to promote vocational education will attend the Milwaukee meeting.

Special interest will be shown in continuation education, as Wisconsin has had more experience with continuation education than any other state in the country. It has a remarkably equipped and administered continuation school, as well as very fine trade schools, which everyone will be interested to see. Every program of the convention will emphasize continuation education, either through agriculture, trade and industry, home economics, commerce, or vocational guidance. The continuation education section itself will emphasize coordination, which is the heart of the continuation-education work.

The president of the A. V. A., Mr. Paul W. Chapman, of Georgia, has written a public letter to members of the organization saying:

"When I turn the gavel over to my successor I want the A. V. A. to be stronger numerically than it has ever been before. At the time we hold our annual banquet, I think we should have 10,000 regular members and at least 100 life members. This letter is written as a personal appeal to you to exert the utmost effort to make this possible. September 1, as you know, marks the beginning of our membership-year.

"You know, I presume, that the 'Wilbur Committee' at their last meeting made the following recommendation: 'Repeal all laws that give annual federal grants in any form to the states for special phases of education of interest to particular groups of the people, or that authorize federal officers to supervise state educational or research activities, approve state plans, or withhold funds in order to compel state compliance with federal requirements.'

"What the result of this recommendation may be none of us knows. It may ultimately help vocational education. But, in my opinion, there has never been such a challenge thrown down before the vocational education leaders of the United States. And our first response should be 100 per cent membership in the organization so largely responsible for the passage of these vocational education laws."

NEW INSTRUCTOR TRAINING CLASSES

Three instructor-training classes in new fields were organized in October by the Division of Vocational Education of the University. These classes are carried on in cooperation with the Bureau of Trade and Industrial Education of the State Department of Education, and are a direct result of the recommendations made at the Pacific Coast Regional Conference held at Phoenix last spring.

Twenty-two officers from the fire departments of Oakland, Berkeley, Richmond, and Piedmont meet regularly at the University Monday afternoons for a two-hour class in a 36-hour course in instructor training. The officers will analyze the fire service and work up courses of instruction for both new and experienced men in the department, and will receive instruction in teaching methods and class organization. A similar class was organized in San Francisco and has enrolled several police officers as well as firemen.

At San Quentin prison an instructor-training class was organized, the enrollment of which consists of twenty-four inmates who are foremen and instructors in the prison.



CALIFORNIA VOCATIONAL FEDERATION



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The San Jose Convention

By E. E. ERICSON

Santa Barbara State Teachers College

Those who attended the San Jose Convention of the California Vocational Association July 31 to August 2 left with memories of splendid hospitality and with increased determination to do a better job as teachers, directors, supervisors, and principals. Careful plans had been made for the comfort of the delegates and guests, and a suitable and effective program was provided.

From the time on Friday morning that Dr. T. D. McQuarrie, president of the San Jose State College, welcomed the guests to San Jose and to the college, until the embers of the fires at La Glorietta Rancho died out on Saturday night there was something of real importance provided every hour of the time. Space would not be available for relating in detail the various presentations of information, new ideas, inspirational addresses, renewals of personal contacts, and the refreshing or establishing of friendships in a meeting such as this.

The readers of these notes who did not attend and those who did but were unable to be present at some of the important meetings will be interested, however, in some of the outstanding occurrences, particularly since the meeting provided some unique features.

The Banquet

The annual banquet was, of course, a most festive occasion. Being presided over by President McQuarrie it was permeated with the usual grace and wit which are characteristic of him on such occasions. With State Superintendent Kersey as chief speaker no banquet lacks a good speech. All of California's special teachers should have been there to hear his list of desirable points for vocational teachers. He emphasized good judgment, initiative, organizing ability, integrity, perseverance, aggressiveness, emotional control, good health, good appearance, and a sense of humor.

Of outstanding interest, too, at the banquet was the presentation to Mr. John C. Beswick of gifts in honor of his long and constructive service in the trade and industrial education field in California. A full account of this presentation will be found elsewhere in these pages.

Important Business

An important reorganization of the California Vocational Association took place which should be considered by all former members and all who are interested in

vocational- and industrial-arts education in California. Two important factors stand out in this connection: (1) the adoption of a new constitution and the changing of the name of the organization; and (2) the forming of state-wide sectional or branch associations which may be affiliated with the central body.

"California Vocational Federation" is the new name chosen for the organization and as indicated by the new constitution which was adopted, the term "vocational" in this connection "shall be construed to mean and include any part, branch, or phase of the general educational, industrial, or commercial system of this state that has for its ultimate purpose the actual preparation of the student for his life work in the non-professional field of occupations, or of increasing the general knowledge and appreciation of conditions, materials, and human relationships within these fields."

A noteworthy fact in connection with the new possibilities for state-wide organizations becoming associated with the Federation was a merger of the former Trade and Industrial group and the Industrial-Arts group. These two groups are now joined into a state-wide body called the Industrial Education Association.

Other associations that are eligible to membership, many of which have already affiliated with the Federation, are the California Agricultural Association, the Continuation Education Association of California, the California Rehabilitation Association, and the California School of the Air.

Types of Memberships

Two types of memberships are provided for by the new constitution, namely, (1) active, at \$1.50 yearly in membership fees, and (2) associate, at 50 cents yearly in membership dues. The former type includes membership in the American Vocational Association; the hope was expressed that everyone will see fit to take out that type of membership. The latter is state-wide only, and does not entitle the holder to connections with the American Vocational Association. With these arrangements provided, it was felt very strongly that no teacher in any of these fields will fail to belong to the new organization. It should be kept in mind that no change was made in the existing regional scheme of organization and affiliation, but that these regional and local groups are encouraged to carry on aggressive activity towards increased interest and widespread membership.

New Association is Formed

By JAMES A. HULL, Secretary-Treasurer
 Industrial Education Association of California

The Industrial Education Association of California, a new state organization, completed its plans for organization, elected officers, and voted to federate with the California Vocational Federation at the annual summer conference in San Jose.

The organization of this group of teachers came as a direct result of a deeply felt need for closer contact of industrial arts and trade and industrial teachers throughout the state in an association to federate and to work with other active associations such as those of the agriculture teachers, the commercial teachers, the continua-

tion education teachers, the rehabilitation education teachers, and others. It was a necessary step to get representation of this large group of teachers in the newly reorganized California Vocational Federation. The Association will now be represented on the administrative council of the Federation, by its duly elected officers and representatives, as will each of the other federated associations.

The new association includes teachers of industrial arts subjects and those in the Smith-Hughes work in trades and industries. The following officers for the current year were elected at the San Jose conference:

President—Robert E. Gilbert, Fremont High School, Oakland.

Vice-President—Fred. E. Brooks, Huntington Beach High School, Huntington Beach.

Secretary-treasurer—James A. Hull, Alameda High School, Alameda.

Space does not permit an explanation at this time of how this organization will function through its various channels. Each potential member will receive, through individual letters in the near future, special information regarding the working plans. The scope of the program for the current school year includes:

1. Intensive efforts to secure institute meetings worthwhile from the viewpoint of industrial arts and vocational teachers.

2. A movement to secure a pro rata share of expenditures from C. T. A. funds, to be used directly for vocational interests.

3. A study of activities affecting the future of Smith-Hughes work in the United States, and particularly in California.

4. A study and discussion leading to an understanding and appreciation of Mr. John Alltucker's report on "Evaluation of Trades and Teaching Experiences in Terms of College Credits."

5. Cooperation with the California Vocational Federation to make the next state convention rich in programs helpful to every member.

6. Efforts to secure institute credits for attendance at state conventions of the California Vocational Federation.

7. Efforts to secure expense money for official delegates to the state convention.

8. Cooperation, through the California Vocational Federation, with the American Vocational Association, to help it to function nationally.

9. Cooperation with the National Education Association, through the California Vocational Federation, to help it realize the import of all vocational work.

10. A state-wide "round table," conducted through a clearing-house, which will give each member some one else's views on topics of mutual interest to help in solving his particular problems.

11. A study of the request for the organization of a bureau which could function by helping members locate new positions as desired.

12. An active drive for membership, which should result in the representation of the Industrial Education Association in every school in California in which there is any teacher of an industrial subject.

Our president has set as our goal, the securing of one thousand members by the time we hold our next annual

convention. Let us all strive together toward that end. We can make this the largest and strongest association of its kind in the United States. In the interest of better and more vocational training for the boys and girls of our state we should each join our own state association and lend our assistance in the carrying out of this program.

The carrying out of the program for the coming year will be made much more satisfactory if each industrial teacher who reads these plans will indorse or criticize them in a simple note, addressed to the Secretary-treasurer of the Industrial Education Association.

"I read, in the last issue of the California Vocational News Notes the suggested program of activities of the Industrial Education Association for the coming year. Inclosed please find my suggestions and also proposals of certain problems for which I would like to see provision for attempts at solution made in this year's program. I am sending — to pay my dues for the year because I know that the support of every interested teacher will be needed to aid in the carrying out of your ambitious program." (See types of membership and dues, page 9.)

The administration solicits all suggestions and questions and will send promptly a receipt for any membership dues sent in as suggested.

Ag Men Hold Conference

By WAYNE L. JOHNSON

Secretary, California Vocational Federation

The annual conference of the California Agriculture Teachers Association was held at San Jose, July 30 to August 2, the last days being in conjunction with the annual meeting of the California Vocational Association. More than 200 Smith-Hughes agriculture teachers met to secure new ideas, an annual custom of the men.

Prominent men from allied fields in the state gave interesting talks, and the men in conference groups exchanged experiences, in putting over new and valuable projects.

Julian A. McPhee, chief of the Bureau of Agricultural Education, showed in his report how satisfactorily the work is progressing in the state. Nearly 5,000 boys are studying agriculture and farm mechanics in the high schools of the state, and practically the same number of adults attend evening classes in the same schools.

Dean C. B. Hutchison of the College of Agriculture, University of California, presented a paper on the relationship between the agricultural work of the high school, which is vocational, and the work of the agricultural college, which is academic and purely scientific. The first need, Dean Hutchison brought out, is the training of farmers, while the next is the training of research and extension workers, teachers, and agricultural leaders.

An intensely interesting talk was given by Mr. Sam Greene, secretary of the California Dairy Council, entitled, "Nothing New in Agriculture." Mr. Greene showed that scientific knowledge of agriculture is as old as civilization itself and has been practiced by a few outstanding men in each generation. He quoted from a few old texts and books of the early nineteenth century showing how they appealed to the people for sanitation, especially in such

products as milk, and also in the handling of foods. He stressed the point that it was not a question of putting out new material, but of scattering the information to as many farmers and future farmers as possible, and then getting them to use it.

A. F. Waldren, chairman of the Agricultural Committee of the California Bankers Association, talked on problems of farm relief and showed how necessary education is to obtain any permanent relief.

Paul Pitman, of KPO headquarters, entertained the group with a wealth of experiences he has had with people throughout the state and country, through the medium of the radio. He showed the place of the radio in the scheme of education and especially in the vocational field.

A report was made on the new constitution as drafted by Robert E. Gilbert, president of the new California Vocational Federation, and his committee, which was enthusiastically received and accepted by the agricultural group. On motion it was unanimously carried to affiliate with the new California Vocational Federation, and two delegates were immediately elected. During the discussion there was no dissent, and all heartily indorsed the idea of a federation of strong state associations.

Election of officers resulted in the following men being chosen: Luther Debois of Woodland, president; E. O. McCorkle of Red Bluff, vice-president; and Byron McMahon of Madera, secretary-treasurer.

PRESENTATION TO JOHN C. BESWICK

At the annual meeting of the California Vocational Association at San Jose in August, Mr. John C. Beswick, chief of the Bureau of Trade and Industrial Education, was signally honored by his fellow workers in the field of vocational education.

Mr. Beswick, at the time of the convention, had completed twenty years of service in the State Department. His hosts of friends up and down the state who deeply appreciated his leadership and the contribution he has made to the cause of vocational education, received a real thrill of enjoyment by taking him by surprise and presenting him with several gifts in token of their esteem. Benjamin W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles, served as spokesman for the group, and very cleverly and graciously presented first, a substantial gift of money with which Mr. Beswick could refurnish his home study which had been recently destroyed by fire. Next, in presentation was a life membership in the American Vocational Association. Then, just to show Mr. Beswick what his friends and co-workers really did think of him, he was presented with a beautifully bound volume of personal letters of appreciation from people, not only in this state, but also from all over the United States. These letters were splendid tributes and their number, their loyalty, and their sincere expression made up a memorial which seldom comes to any man.

Perhaps nothing the vocational teachers of this state, as a group, have ever done brought so much personal satisfaction and real pleasure to them as this "Presentation" to Mr. Beswick. It was a generous and voluntary appreciation to a fellow-worker who has worked long and faithfully, led wisely, and contributed much to a great cause.

Some people in the state, because this "Presentation" was made to Mr. Beswick unfortunately gained the impression that he was going to retire. Nothing of this kind was in mind. It was only an expression of encouragement and gratitude to one in the midst of a busy work by those who are anxious to follow his leadership for many years to come.—J. R. ALLTUCKER.

CONTINUATION EDUCATION IN C. V. F.

At the San Jose meeting, the continuation education teachers of the state took the necessary steps for participation in the new California Vocational Federation. In the first place, a state-wide organization, to be known as the California Continuation Education Association, was formed. Mr. Arthur E. Paine of Huntington Park was elected president, Mrs. Margaret Frost of Los Angeles, vice-president, and Miss Glenna Harris of San Jose, secretary.

This association, formed purely for the purpose of providing a means for joining our hands with others in the new federation of vocational education groups, will not in any way supersede the two already active associations: the Continuation Education Association of Northern California, and the Continuation Education Association of Southern California. The joint organization will hold but one meeting annually, that one at the time and place of the annual meeting of the Federation in the summer.

Further, the active participation of the northern and southern associations in the new Federation is given extra assurance by the adopted provision that the three members of the executive council of the Federation from the Continuation Education Association shall be the president of the newly formed state association, and the presidents of the northern and southern groups respectively.

Immediately after the adoption of the new constitution setting up the California Vocational Federation, the Continuation Education Association presented its petition for affiliation, and was represented at the executive council meeting held that afternoon, and thus took part in the selection of the officers of the Federation. Mr. J. E. Carpenter of Sacramento, was elected one of the vice-presidents of the Federation.—A. E. PAINE.

C. V. F. CONFERENCE AT FRESNO

The members of the state administrative council of the California Vocational Federation, together with the Central Division of the Federation met, in Fresno on Saturday, November 8, for its regular fall meeting. The Council considered matters of importance to the Federation and its member organizations, and formulated plans for the next annual convention which will be in Los Angeles at the time of the N. E. A. convention.

The official meeting of the council was followed by a joint meeting of the council and the Central Division. The luncheon speaker, Mr. Paul M. Pitman, director of radio station KPO, discussed character building through vocational education.

After section meetings of industrial, homemaking, commercial, rehabilitation, agriculture, and continuation education groups another joint meeting was held at Roosevelt Junior High School, where dinner was served. Superintendent Hubbard welcomed the association and Dr. Nicholas Ricciardi gave the address of the evening.

Correlated Objectives in Commercial Education*

By Dr. CHARLES G. REIGNER

I

It is necessary to correlate classroom teaching of any commercial subject with first-hand information gotten on the job. The best way is to make arrangements to do the thing in school that they are actually doing in a business office. Never has American business competition been keyed up to the point it is at present. One business firm attempted to reduce the cost of writing a letter. Forty cents was the cost of a letter when the study began. This cost was reduced to thirty cents. Fifteen dollars was found to be a living wage per week. Three times that was required for turnover. Therefore, \$45 divided by \$.30 equals 150 letters a week. Suppose a stenographer spends 27 hours a week writing letters, then 27 into 150 equals 6 letters an hour. A girl must turn out 150 letters a week, or 6 letters an hour required. If a girl can do 300 letters a week she is worth twice as much as the girl who writes only 150. The average letter consists of 20 lines, so transcribing speed of 20 words a minute is required.

II.

We must correlate our objectives with the situation that actually exists on the job. In the training of young people to be vocationally efficient, the judgments of the school room must always be checked by the conditions on the job. The work we are doing is vocational work, and to whatever extent we allow our attention to be diverted from the vocational aim, to that extent commercial education is deficient. The most efficient way to correlate commercial education with conditions that actually exist on the job is through contact with such conditions. It is the responsibility of every commercial teacher to become familiar with actual business conditions.

III.

The methods of teaching must be correlated with modern experiments in the psychological laboratory. We need to know just how habits are formed, just what will arrest or accelerate them, how often can an act be repeated with value to the one doing it: Thorndike answered this with the experiment of ball tossing, and others followed it, so we have the law of repetition. The law of repetition is this: the simpler an act, the more times it can be repeated with profit to the learner in speed and accuracy, and, conversely, the more complicated an act, the fewer times it can be repeated with profit to the learner. So it is the teacher's job to analyze the act and see whether it is a simple act or a complicated one. When a complicated act is repeated five, six, or, at the most, seven times, further repetition is wasteful, uneconomical, and lowers skill and accuracy already acquired. Practice does not make perfect. We have revised the old maxim to read: "Practice, when concentrated on the objective of the practice, makes perfect." An effective way of teaching a skill subject is to have short practice periods frequently

alternated as to the character of the practice. It is a crime for any teacher to go before any group of boys and girls without having a plan made up of short practice periods frequently alternated as to the kind of practice carried on. A suggested plan for shorthand is: 5 minutes' practice on isolated words; 10 minutes' dictation on material practiced outside the class, reading back, etc., and finally 5 or 10 minutes' dictation on new material which will be transcribed or read back. Short practice periods frequently alternated as to the kind of practice given is the basic principle of good teaching.

IV.

We must correlate subject matter with student ability. The outstanding development of education in this decade is the more or less successful attempt to set up quantitative measurements of the educational process. New York ruled that no one should take shorthand unless for four semesters he had received 75 per cent. Then they investigated what this 75 per cent meant. This percentage rating varied with every teacher. The ruling, therefore, did not work. There is a very high correlation between mastery of the mechanical aspects of English and success in shorthand. Primarily and fundamentally we are all teachers of English.

The results of shorthand are measured by the pupils' mastery of the mechanical aspects of the English language. We must weave into the instruction such help as we can, therefore, on these aspects of English.

COMMERCIAL NEWS ITEMS

The Southern California Commercial Teachers' Association held its regular quarterly meeting at Glendale on Saturday, October 18. President Baker arranged an interesting program. The morning was given over to sectional meetings and the afternoon devoted to general speakers.

The Bay Section of the Commercial Teachers' Association held its quarterly meeting in Oakland on Saturday, October 11. The morning was devoted to sectional meetings. Superintendent Vierling Kersey was the principal speaker at the luncheon meeting.

The commercial teachers of the North Central Section held a session during the institute in Chico on October 21. Dr. Ira W. Kibby, chief of the Bureau of Business Education was the principal speaker.

California welcomes Professor Benjamin R. Haynes to California. Professor Haynes comes to the University of Southern California to head the commercial teacher-training work in that institution. He brings with him rich experience, both in commercial teaching and teacher-training work, from the East. Professor Haynes will be a most valuable addition to the commercial group in California.

The National Education Association will meet in Los Angeles during the coming summer. Professor Helen Reynolds, chairman of the Business Education Section is arranging a strong program at this meeting. Commercial teachers should plan their coming summer vacation so that they can take advantage of the meetings in Los Angeles.

* Excerpts from a speech given at the Typewriting Section, Southern California Commercial Teachers' Association, Long Beach, California.

STATE TYPEWRITING TEST

Over 40,000 test papers were received by the Bureau of Business Education as a result of the recent typewriting test. Every fifth paper has been re-read to determine the accuracy of correction. In the 8,970 papers sampled, 6,278 errors in correction were found, or less than one error per paper. The Bureau feels that this is an excellent showing on the part of teachers checking the test papers. The following table shows the results of the check:

SUMMARY OF ERRORS FOUND IN CORRECTING TYPEWRITING PAPERS

Schools	Number	Tests checked	Tests with errors	Tests with no errors
Senior high schools.....	320	7078	2081	4773
Junior high schools.....	87	1891	593	1495
Total	387	8969	2674	6268

Considering the large number of papers, there were very few short lines and strike-overs; erasures also were very scarce, which indicates that much progress has been made the past few years in observance of International Rules. Pupils realize that it is time wasted to attempt to make a *d* out of an *o* or an *l* out of an *i*.

It is deplorable that pupils are compelled to use crippled machines. Many of the machines apparently were out of order, while the ribbons on others were so faded that it was almost impossible to read the papers typed on them.

The following words were found to be most frequently written incorrectly:

until—untill	billows—bellows
airplane—airplaine	ply—play
from—form	mountain—mountian
ravines—ravenes	proclaimed—proclained
sound—sould	warning—worning
ocasion—accasion	beautiful—various ways
approaching—appraoching	
Los Angeles—Los Angels or Angles	
completely—completely or completly	
believe—beleive	
crowded—crowed	
rugged—ragged	
breakers—breaders	
viewing—veiwing	
double—bouble	

Once "mountain top" was written "hill top"; twice "ravines" were called "recesses."

A great many errors occurred in wrong division of words at the end of the line. Of course there always is considerable question as to the correct division of unusual words, but many of these papers contained division of such ordinary small words as "like," "was," "that," "its," "from," etc.

Several of the pupils started writing on the second page of the test. It is to be presumed that they had been permitted to write the first page to become "accustomed" to the type of words used and to the style of writing.

The words most frequently omitted are in italics in the following sentence of the test:

"Its billows were tinted by the early morning sun, and the two rainbows above it proclaimed a *double warning* to any mariner who might still believe that a morning rainbow was an omen of an approaching storm." Since it made fairly good reading by leaving it out, only about half the omissions were checked by the pupils. However, a large number of omissions were regarding "the early morning sun" and "morning rainbow."

Incorrect indentations were very numerous. In many cases even perfect papers were not indented correctly. Many pupils merely use the space bar until it *appears* to be all right for indenting. Since very few wrote more than two paragraphs, it is safe to state that about half the papers which contained only *two* errors were wrong on account of their indentations. They indented from two to eight spaces.

In many cases the person checking the test marked the last word incorrect if it was not finished. It is not wrong *unless* an error occurs in it—another misunderstanding of rules.

Florence Scribner, Semester II, Inglewood, had a 20-word perfect test, with use of only one hand. The teacher had placed the information at the bottom of her paper.

PIGEON PROJECTS AT CHAFFEY

A station was established at Chaffey Union High School in 1925-26 as a squab-breeding contest and experiment station in connection with the already well-established poultry plant and egg-laying contest in the school. One of the purposes of the squab-breeding station was to interest boys who had not shown an interest in other school projects, not so much to develop a vocation or a new field of endeavor, but rather to develop a new interest and create a desire for scientific breeding and business management. The project also served as a laboratory of information for the layman, the commercial squab-breeder, and other pigeon fanciers to help solve some of their difficulties, and also to determine the differences, if any, in the economic production qualities of the various breeds of the squab-producing varieties of pigeons.

A new and most interesting project was developed last year at the Chaffey Continuation High School. The students remodeled an old shed, divided it into three lofts and stocked each loft with fire pairs of pigeons each. In one are White Kings; in another White Carneaux; and in the thrid three pairs of Silver Kings, two pairs of Maltese Cross, and one pair of King Strausser. At the present time two boys have charge of the lofts and will run a contest similar to the Chaffey squab-breeding contest. The boys are keeping records of the amount of feed consumed; the dates the eggs are laid; the number of squabs produced, and their weight, the number of eggs infertile, broken, or otherwise unproductive, and the peculiar breeding and other habits of the birds.

Ray L. Delhauer, who is in charge of the Chaffey Squab-breeding station, has been a pigeon fancier for years, and during the war was in charge of the men who trained carrier pigeons in the communications service. He is, however, more interested in boys than in pigeons and uses these projects chiefly as a means of developing certain interests and traits in boys who may not be interested in other school projects.

Agricultural Leadership

By A. G. RINN

Regional Supervisor, Agricultural Education

It would be difficult to carry on an argument with those who say agriculture needs leaders and leadership. One is likely to get the worst of the argument. All manner of human activity requires leadership. Armies must have generals; steamships and football teams, captains; factories, managers; universities and nations, presidents. It is in the nature of things that some must lead and others follow. A Utopia may some day be developed where everyone will have equal status, but that will occur only when all men are literally created equal.

Some people say leaders are born and not made—meaning that unless people are endowed with leadership characteristics, all the training in the world will be useless; they can never be developed into leaders. They aver that leaders develop only through self-owned devices which, when brought into play by the individual's own volition, produce leadership phenomena.

If we take this viewpoint we might as well give up the idea of more and better agricultural leadership. If leadership can develop only through natural forces, it will be a long time before the country is properly led.

We are of the opinion that a lot more people possess leadership qualities, in greater or less degree, than most people suppose. We agree that leaders are born—but they can also be made, in fact always are made by the experiences which they encounter, and can be made more or less artificially by providing the experiences which develop leadership.

Most executives, probably all executives, develop by "climbing the ladder." By so doing they familiarize themselves thoroughly with each department of a particular enterprise. By the time they have reached the top rung of the ladder they are masters of all of the details of the enterprise, which knowledge is the first essential of a leader.

The question before the house then, as I see it, is not that agriculture needs leadership—that's a truism—rather, it is how are we going to develop leaders for agriculture? We will need to dismiss biologic control as out of the question—for the time being at least. The only other course, is to train the possibilities we have.

Analysis of Leadership

What does leadership consist of? In other words, what attributes distinguish a leader from a follower? Does a person need to be five feet eight inches tall, have steel grey eyes, and a sunny disposition to be a leader? The sunny disposition might help. Does a person need to be industrious to be a good leader? Probably not. There are, however, no doubt some general attributes which characterize good leaders, although we believe that leadership is more specific than general. A man may be an exceptional leader in one field and of no value in another.

1. *Knowledge*.—There is no question but that a person needs to know his field in order to be a leader in it. Politicians with a lot of ballyhoo and promises get by for a while, but one must deliver the goods to get anywhere and to do this he must know his truck crops.

2. *Experience*.—Add to the old adage "Experience is the best teacher" and its amendment, "... but also the most expensive," a further amendment, "... but it need not be" and you get our reaction to the value and importance of experience. No man can be a leader in a field the working parts of which he has not familiarized himself with by actual contact. As well expect someone to teach aviation who has never flown.

3. *Judgment*.—Through knowledge and experience come judgment and only thus. No further comment seems necessary on this point. Judgment may also be called wisdom or vision or foresight. The terms are really synonymous.

4. *Sociability*.—With this term we wish to imply not only the desire and ability to meet people favorably and well but also the interest of the leader in the social welfare and betterment of humanity. It is possible to lead the race to destruction and for selfish reasons; a leader must lead to constructive ends.

5. *Alertness*.—We hesitate to add this last attribute as probably being superfluous. One can hardly picture a man of knowledge, wisdom, and experience who is not alert.

Teachable Qualities

Now we come to the point which, in this roundabout way, we have been trying to make. If these are the qualities which characterize leaders, namely: knowledge, experience, judgment, sociability, and alertness, are they not teachable? We most emphatically believe that they are, for can we not impart information as knowledge? Can we not provide experience? Can we not, through these two, develop judgment? Is it not possible, through social activities, to develop sociability? And, through a process of training, can we not improve alertness?

In a measure it has been done and is being done in all of the schools through all time whether that school was the home, the church, the shop, or the educational institution. The only difference lies in that we have not been conscious of it. What we need now is a recognition of what constitutes leadership; an admission that leaders may be made; and knowledge of how to teach leadership.

Experiences which Develop Qualities

In the Smith-Hughes vocational agriculture departments of the state, a program to accomplish this end is being formulated. Through classroom instruction in agriculture, both in the laboratory and in the field, *knowledge* of the subject is developed. Through project work *experience* is attained. From knowledge and experience *judgment* develops. In the organization of Future Farmers of America right *social attitudes* appear. In a program of extra-curricular activities sponsored by the teachers of agriculture, alertness develops in judging contests. The Smith-Hughes departments of vocational agriculture can be expected to develop agricultural leadership.

SUMMER SESSION ACTIVITIES IN AGRICULTURE

The agricultural education summer session at the University Farm at Davis, California, was very successful this year. There was a total enrollment of 81 agricultural teachers who stayed one week or longer. The work was divided into units of one week each. The first week was devoted to instruction in poultry with Professor W. E. Lloyd of the Poultry Division, University Farm, Davis, in charge; the second week, to horticulture under Mr. L. M. McQuesten of the University Farm; and the third week, to animal husbandry under Professor Carroll Howell also of the University Farm.

Simultaneously with the work in agriculture, a three-weeks' course was given for farm mechanics teachers. This work included the study of forging, care and repair of farm machinery, and gas engines.

Professional courses in agricultural education were given for the entire three weeks by Julian A. McPhee, chief of the Bureau of Agricultural Education; and Richard J. Werner, Howard F. Chappell, and Edward W. Everett, all regional supervisors of agricultural education.

This is the second year the summer session for agricultural teachers was arranged on this basis, and the teachers were well pleased with the arrangement. It gave them an opportunity to attend summer session and at the same time carry on their regular activities in agriculture in their local communities.

AGRICULTURAL EDUCATION EMPHASIZED AT STATE FAIR

The activities of the Bureau of Agricultural Education at the State Fair were greater this year than ever before. The camp, the exhibits, and the convention made a week filled with interest.

Camp Lillard.—The usual three-days school camp, under the direction of the Bureau of Agricultural Education, was held on September 2, 3, and 4, with a total registration of 540 students. There were schools represented from as far north as Alturas in Modoc County and as far south as Escondido in San Diego County. Some of the other schools coming from far distances to participate were Arcata in Humboldt County, Hemet in Riverside County, and Ontario in San Bernardino County. Eighty-one high schools were represented. The camp was run on semi-military lines. The students, while in attendance, received instruction in farm machinery, livestock, poultry, dairy cattle, dairy products, and horticulture.

Exhibits.—Besides attending Camp Lillard, and participating in the various activities, the high-school agricultural students exhibited 200 head of livestock, including dairy cattle, beef cattle, hogs, and sheep. In addition to exhibiting livestock in the Future Farmers of America section, many of the boys entered animals in the open classes, won several hundreds of dollars in premiums and took some grand championships. Such success shows that many of the boys have developed their abilities in the breeding business to the extent of being on a par with some of the outstanding livestock breeders of the state.

The Future Farmers of America featured 806 birds in their poultry exhibits. Ten high-school agricultural departments put on feature exhibits, showing the outstanding accomplishments of their departments; 45 schools exhibited horticultural products from their project work.

Future Farmers of America Convention.—In addition to the above noted activities the annual convention of the Future Farmers of America, which is an organization of high-school students was held on September 4. The ten outstanding high-school agricultural students of the state were promoted to the degree of "California State Farmer." Governor C. C. Young presented the keys to these honored students. Governor Young was also elected a member and was presented with a gold key for the degree of "California State Farmer."

Awards.—In the feature exhibits the Petaluma High School Agricultural Department won first place with a rating of 95 per cent. The Modesto High School Agricultural Department won the grand prize for Camp Lillard, Class A Schools, with 238.2 points. The Fair Oaks High School Agricultural Department won the grand prize for Camp Lillard, Class B Schools, with 125 points. (The Class A Schools are those having more than two agriculture teachers, and the Class B Schools are those with two agricultural teachers or less.)

FUTURE FARMERS MAKE LARGE ENTRIES AT BEEF SHOW

The Future Farmers' livestock entries for the Junior Livestock and Baby Beef Show at the South San Francisco Union Stock Yards were larger this year than at any time in the three years that they have participated at this exhibit. By the first of October 115 boys from 26 high schools had registered over 300 animals for exhibition on October 27, 28, and 29. The animals on exhibit were auctioned off at the conclusion of the show.

FRESNO DISTRICT FAIR

The Future Farmers of America activities at the Fresno District Fair held from September 9 to 14, constituted a much larger part of the program than in past years. Future Farmer chapters placed attractive feature booths, seven schools building a booth, and nineteen schools contributed horticulture and farm mechanics exhibits. In the poultry 302 utility birds were displayed. The various schools adjacent to the fair exhibited 46 sheep, 11 dairy cattle and about 150 heads of hogs. In all, almost \$1,000 was taken in prize money in the Future Farmer division, besides a considerable amount taken in open competition.

On Saturday, September 13, five student judging contests were held. Livestock and dairy cattle contests were won by Hanford High School Future Farmers; Madera won the agronomy contest; Fowler the poultry contest; and Riverdale placed first in dairy products.

An effort will be made to obtain a special building for the Future Farmers of America to display their exhibits at the 1931 Fresno District Fair.—E. W. EVERETT.

NEW AGRICULTURE SCHOOLS IN THE SAN JOAQUIN VALLEY

Four new schools in the San Joaquin Valley have added courses in agriculture to their course of study for the coming school year. These schools, with the name of the director of agriculture, are as follows:

Hilmar Union High School, John Hardie.
Westside Union High School (Los Banos), Vard Shepard.
Laton Union High School, Alfred Loy.
Wasco Union High School, J. L. Fidler.

BOOK NOTES

BROYLES, W. A. *A work-book for students in fruit-growing.* The Century Company, New York. Price, \$2.00.

As the title suggests this volume is organized on a basis of contracts, 16 major contracts with many sub-contracts, in which the student records his findings in fruit-growing. As compared with the assigning of pages from college textbooks or the conducting of aimless discussions, the "Work-Book" represents a long forward step. The approach to the book, despite its aim at "purposeful activity" and the question form of the contract titles, is that of the presentation of systematized subject matter.

Although the book is not so well adapted to California conditions in subject matter, itself, it might well be utilized by California instructors as a reference book for student use, as well as a source of inspiration for the development of daily lesson sheets, from which the book has its origin.—DOUGLASS SAUNDERS.

DAVEY, C. P., and CAMERON, JAMES. *Social science lessons for junior workers.* Century Company, New York. Price, 76 cents.

The plan of this book is based on two needs which are recognized, particularly in connection with continuation-school work, namely: the lack of social adjustment of the average continuation-school student, and the need for individual instruction. The book is divided into three parts: Section I deals with industrial relationships; Section II, civic relationships and problems; and Section III economic problems and relations. Section III is designed especially to meet the needs of more advanced students and students with a longer school expectancy. Sections I and II are designed to meet the immediate needs of the average student.

The foreword to the teacher is excellent, and if the instructions given there are followed faithfully in using the text the work should be effective. The text, as the authors point out, should not be used as a whole for each individual pupil, but additional local supplementary reference material should be added to make its use effective in classroom work and to adapt it to the needs of the individual pupil.—RUTH L. TURNER.

McGEE, R. A., and STURTEVANT, W. W. *General Mechanical Drawing.* Bruce Publishing Company, 1930.

This book is to be commended for the thoroughness with which the large variety of drafting problems, and problems in occupations depending on drafting, have been presented. The combining of a large and well selected group of drafting problems to best illustrate some of the most useful and interesting facts about industrial organizations, the strength and kinds of materials, the mechanics, as well as the technique and skill of drafting, should challenge the consideration of all Junior High School teachers.

When the student has completed this book he should have a general knowledge and a usable skill in simple mechanical drawing.—W. E. DUNKUM.

BOLLINGER, J. W. *Elementary wrought iron.* Bruce, 1930.

Mr. Bollinger has written a book which should prove indispensable to the shop teacher in a general shop. The

book contains considerable detailed information about fundamental wrought-iron practices. The problems presented are attractive and have a worthwhile value upon completion—JOHN J. FRICK.

OCCUPATIONAL STUDIES

The U. S. Office of Education in Washington, D. C., is issuing a series of circulars giving a brief description of various occupations, a list of references and a list of schools in which training may be given for the occupation. Two circulars recently released are, no. 19, Medical Education and no. 20, Journalism, both by Walter J. Greenleaf.

LIST OF PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 16. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High School Students. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

CALIFORNIA VOCATIONAL NEWS NOTES

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No. 2

Opportunities for Women in Trade Training

By LAURINE BROADWELL

Assistant Director of Vocational Education, Los Angeles

The Los Angeles school system has trained teachers in three lines of vocational work for women: prevocational classes, trade classes, and adult work. In organizing the work in the high schools, two objectives are kept in mind: one, to try out the students to see whether they have trade ability; and the other, to train them definitely for industry.

In the exploratory, or prevocational courses, the students take a semester's work or a year's work for two periods a day (90 minutes). Our trade classes may be organized strictly on the Smith-Hughes plan or, in some of our smaller high schools, the students take the work for three clock hours but they do not have any related work. In either case the instruction is given to a selected group, the work is organized on a production basis and strictly according to trade standards. We offer instruction to our high school girls in cosmetology, power sewing, dressmaking, millinery, commercial art, and cookery.

Survey of the Trade

Before beginning any trade classes it is necessary to know the local demands and the placement possibilities. It is also necessary to know the conditions under which the workers are employed, their wages, whether the work is specialized or general in nature, and what are the up-to-date methods. In order to get this information, an advisory committee, consisting of from three to seven members, is appointed from the trade. These people meet with us and advise us constantly as to the quality of the work that is being given. It would be rather difficult to conduct the trade work without such help, especially in a community where industry is more or less scattered and where the school district covers an enormous territory. When students are placed in industry an effort is made to follow them up and find out how they are succeeding. If they do not get along on the job, we want to know why so we can profit by this experience.

Trade School Classes

Our largest center of trade training for women is at the Frank Wiggins Trade School. There the students learn a trade under ideal conditions because the whole spirit of the school is for trade instruction. Courses are offered in dressmaking, power sewing, alterations, spotting and pressing, millinery, cosmetology, commercial art, cooking, waitress training, lunch counter and soda dispensary, and P.B.X. telephone. The administrative set-up of this school is such that one teacher in every trade is given time to

do coordinating. She not only places the girls and makes new industrial contacts, but she also keeps a close record of the progress of the girl on the job. The information that such a teacher is constantly bringing back to the rest of the teaching group is invaluable.

Our biggest problem in developing trade training is due to the constant revolution going on in industry today. What industry uses today may be thrown out tomorrow. This offers a financial problem because

if first-class training is to be given, there must be up-to-date equipment, and consequently our equipment bills are rather large. The expense of equipment has been partially met by the product of the classes. The students receive no pay for the work they do and a small sum is charged for all the work done; thus a fund is created from which to purchase all the supplies needed for the trade class. Any surplus is spent for new equipment.

Many classes are practically self-supporting. This is as it should be, because when instructors know that they have to run their classes on an economical basis and meet their expenses, they are much more likely to run them in a business-like way. It would be easy to fall into a rut and let the school board buy all the equipment and supplies.

In spite of the mechanization of industry, personality is playing a very important part in employment, and so a



CLASS IN COSMETOLOGY, FRANK WIGGINS TRADE SCHOOL

definite unit of the instruction in trade classes deals with trade ethics. At every meeting of the advisory group, some employer complains about the attitude of the workers. This all goes back to a question of personality and the development of correct habits, both from the trade point of view and the general standards of courtesy, honesty, etc. We try to impress upon our students the importance of attitude, and teachers are reminded that they must constantly observe the girls and direct them into proper work habits. Probably in the future the selection of students will be made with as great emphasis on right habits and character, as on actual trade training itself.

Adult Classes

In the adult classes we have 47 teachers, giving instruction in the following lines: dressmaking, millinery, commercial art, cookery, and nursing. The teachers of these

classes meet in a different center each day. The classes are usually held in the home-economics room or shop room of some elementary school, where the mothers come in for instruction. These classes are very exacting and the mothers demand first-class instruction. They know whether a teacher is up-to-date in millinery or dressmaking, and if the instruction is not satisfactory the classes soon fail. We hope this will always be the case.

In addition to these opportunities to secure trade training, women may also enter some of the trade classes for men in the trade school if there is reason to think they could later find employment in these trades. Occasionally women enter the classes in printing, drafting, or telegraphy in the Frank Wiggins Trade School, and such expansion of the program for women is possible because Los Angeles has made its trade school a coeducational institution.

Beginnings of Continuation Education in California*

By JOHN E. CARPENTER

Director of Adult and Continuation Education, Sacramento

To Robert J. Leonard, that fine, sensitive soul, and to Edwin R. Snyder, high-minded humanitarian, and to Dr. Snyder's staff in the State Department of Education we owe the initiation of continuation education in California. Of course the debt which California owes to some of you in this room and to others in other states who pioneered this field in advance of, and alongside of our state, can never be measured, much less, repaid.

Perhaps the unique feature of the opening of the continuation education program in California consisted in the training program for teachers and administrators who were to have the responsibility for the conduct of classes under the new law. This program was made possible through the wise provision that it would not become effective until the fall term of 1920, approximately a year and a half after its passage by the legislature early in 1919. Even then, only pupils sixteen years old were required to attend, those of seventeen not being affected until a year later, thus avoiding the problem of calling back into school attendance pupils who had been allowed to drop out under the former requirement of attendance to the age of sixteen only. But, as I have implied, this provision made possible a very effective training program extending over more than a year's time. This training program covered three groups of persons: first, employers and parents and others outside the school system who would be affected by the operation of the new law; second, school administrators who would have the responsibility for administering the law in their respective communities; and third, the teachers who would have the direct responsibility of giving instruction to this new group of students. I dare say that the first group, the general public, was as well "sold" to the proposal by the time classes were actually started as has been the case in any state where this program has been initiated. Certainly we have had, throughout my experience in California, a very high degree of cooperation on the part of

employers, especially those employing large groups of minors. These are almost unanimously not merely passively acquiescent to the requirements of the program, but actively participant in its defense and in our later measures to strengthen and extend its scope.

In the second group, we can be frank to say within the family circle here present this afternoon, there were some for whom a year and a half was not sufficient time to win them over enthusiastically to the support of this work. It is implicit in the traditions of American school backgrounds from which our school administrators are naturally drawn, that although the public school is nominally open to all, practically, its program has been confined to meet the needs of the few beyond the completion of the elementary grades. We have seen the steady development of a higher spirit of service in the high schools of our state, however, and at present there are few spots indeed where the high school, either through the medium of continuation classes or through a recognized program in the regular classes, does not meet, in very high degree, the actual life needs of all the young people of the community. In the main and throughout the state, school administrators were fully in accord with the new proposal and took full advantage of the formal training classes as well as other available means to be prepared for the operation of the new provision. These training classes were set up throughout the state by a cooperative arrangement between the State Department of Education, represented by Dr. Snyder, and the University of California, represented by Professor Leonard.

In the group for which I acted as leader, there were enrolled one city superintendent of schools, three district superintendents, seven school principals, three vice-principals, and twelve teachers. The teachers who anticipated participation in the program when classes were started, and who comprised the third group for whom a training program was definitely planned, were given, upon completion of the twelve-weeks' intensive course, both university credit and a state credential authorizing them to act

* Paper delivered at the first section meeting on Continuation Education at the A.V.A. Convention in Milwaukee, December, 1930.

as instructors in the new classes. Professor Leonard and Dr. Snyder believed that many of the best prospective teachers for these special classes would be drawn from the ranks of elementary schools, or from outside the teaching profession altogether, rather than from high schools. Hence this wise provision that by the completion of this short intensive course of training such persons could become eligible to teach in continuation schools which were specifically placed by law upon the high school plane.

Throughout the state some twenty-five training centers were conducted, with a group probably averaging twenty persons in attendance at each center. Thus some five hundred key persons, administrators, and teachers, were given direct, intensive and somewhat extensive opportunity to become familiar with the new plan, its reasons, its implications, its problems. I have no personal knowledge of a more thorough program of preparation for the inauguration of any new educational movement anywhere than was contained in this state-wide training program.

The content material for these training centers had been carefully prepared and made available in printed form for all who enrolled. This consisted of three parts:

1. A question and answer pamphlet covering the salient features of the new law, prepared by Dr. Snyder and his staff of the State Department of Education.
2. A set of individual lesson sheets, with space left for filling in answers to the assignments, prepared by Professor Leonard and his staff at the state university.
3. A syllabus of information covering the background conditions leading up to the initiation of this new program for employed minors. This syllabus was the result of studies carried on throughout the previous year by a Friday-evening seminar group conducted at the university by Professor Leonard. The personnel of that group included superintendents, teacher-training supervisors, and supervisors from the district offices of the Federal Board. That the resulting syllabus was of a high degree of merit goes without saying.

Time is lacking for me even to mention the names of more than a very few of the pioneers in the actual administration of the law in California: such names as Patty of Berkeley, Kersey of Los Angeles, Campion of Stockton, and Miss Wolcott, Mr. Paine, Mrs. (Ma) Baird, Mrs. Shedden, in smaller centers.

These leaders imbibed something of the enthusiasm and high idealism of Dr. Snyder and Professor Leonard and have added their own peculiar merit to the task. As a result, our whole state school system takes on more and more of the spirit of service in the interests of *all* the boys and girls in the state. Less and less will the program in the continuation schools of the future differ and stand out in contrast with that of the regular high schools. More and more these regular schools are rebuilding their curricula to meet the real needs of real children, and do not attempt to reform the child to fit a preconceived, cramped, and restricted educational mold of doubtful value.

This brings me, Madam Chairman, to a reference to my subject as it appears on the printed program, "Ten Years of Continuation Education in California." When I first saw the subject so stated, I was tempted to take liberties with its evident meaning, and to spend my time today discussing, not the *past* ten years of that program, but the *next* ten!

If the first ten years are the hardest, as doubtless they are, I believe the next ten years are the most dangerous. If we erred in being too idealistic, too visionary, in the initiation of our schools, we are in great danger of being too blasé in their continuance. If there was the wildness of youth in our early days, there may be the tameness and placidity of age in these later ones. At the first, continuation education was only an idea, an ideal, a vision of a need and the desire to meet the need, without a clear-cut plan or program for its accomplishment. From now on we are in danger of having a program, a system, an organization, and bending our efforts to the continuation of that system and the organization we have built up, without sufficiently close check-up upon ourselves to determine whether the needs to be met are the same as they were, or in any event, whether our organization is continuously being readapted to meet present needs.

With the changing character taken on by the full-time schools, a change about which we should feel highly elated, let us be sure that we do not merely continue our present program as already developed, but that we continually revise it to meet the real needs of the boys and girls of today, not those of the day when we first set up continuation classes.

We have, in the past, occupied a front-line trench in one sector of educational advance. Let us be prepared to move forward, not stand still, as the main body of supporting troops comes up to our previous position.

In somewhat this spirit, California is just now taking what seems to be the next logical step in this field, that of providing training for the unemployed, out-of-school minor. First indications are that this step is to be much easier to take than the former one. Again, more than a year elapsed between the enactment of the necessary legislation and the effective operation of the law. Now all minors who are unemployed remain under the direction of the school system until the age of eighteen. A very large number elect to remain in the regular classes of the high schools, now so much more effectively administered to meet their needs than formerly. Many, however, leave those classes and enter the continuation classes for daily attendance. This is especially true of those minors who are in seasonal or other temporary occupations. For them, the adjustableness of the continuation classes, and their more practical and immediate aims provide a most desirable substitute for the loafing which was too often the habit of these young people during such periods of unemployment. But this story is part of the second ten years of our California program, so we leave it for a later day.

NEW AGRICULTURAL BUILDING AT MODESTO

The agricultural building provided by the Modesto Board of Education as a new unit of the Modesto High School was dedicated Tuesday, December 11, 1930, under the sponsorship of the Modesto chapter of the Future Farmers of America.

The building consists of a large shop, two classrooms, a laboratory, a small library, and two offices. Provision has been made for general farmer meetings, experimental plots, and modern laboratory facilities.

This new home provides a center of agricultural activities for Modesto and its neighboring territory.

Training and Guidance in the Junior High School

By W. E. DUNKUM

Willard Junior High School, Berkeley

The vocational program in the junior high schools of Berkeley combines not only trade exposure but also vocational guidance and character building. Trade exposure is so treated that from a rich experience the student may discover his own reactions to the various fields of labor, aiding us to sort out his capacities and adaptabilities, and to prolong in school his preparation for life work. Vocational guidance takes that true meaning of the word that utilizes a maximum of awakening and enlightenment and a minimum of control and prescription. We are solicitous to find ways and means to arouse the learner to do things for himself without the persuasion of an instructor; we emphasize an intelligent planning for life work, not only making school work more efficient, but protecting society from those ills which arise when adults find themselves engaged in work for which they have neither the inclination nor the aptitude. Combining trade exposure with vocational guidance relates education to human welfare more closely and leads the future worker to a more sympathetic cooperation with society. This in itself makes for character building. Vocational tendencies are discovered, provision is made for the exceptional child, whether backward or precocious, the "lockstep" is broken up, and opportunity is given for prideful accomplishment of a worthwhile purpose—the surest guarantee of a good citizen in the making.

Instruction Sheets an Aid

We are solving our problems in the following way: studies have been made of the types of work that the learner will enter on leaving school. We have succeeded within the limitation of the school, in arranging our shops to meet these demands. From an analysis of the true vocational nature of each trade represented in our shops we have devised a series of small learning units and supplemented each of these units with a printed instruction sheet. While the instructor is busy with one pupil and his problems the other pupils of the class, consulting the instruction sheet, are independently at work, learning to rely upon their own skill and to develop their own powers of interpretation.

The student is allowed to select any type of work in our shop and to proceed with the learning units in accordance with his ability. Having completed any learning unit, he may, at his option, continue to the next in that series or change to another and different type. Learning units are carefully selected, are truly vocational in nature, and have as reliable a vision of the trade as possible.

Levels of Same Learning Difficult

A large percentage of our boys aim to enter the engineering profession. Our drawing course has been arranged to meet this need. We have surveyed the principal engineering fields, analyzed their common factors and their outstanding differences. From this analysis we have constructed a mechanical drawing course that challenges comparison. Plates have been selected that best represent the true nature of each field. Sequence is based on diffi-

culty of line construction encountered in producing a drawing of a given object. Problems are taken in small learning units and in a regular sequence within the comprehension and mathematical limits of the student. Each problem shows as clearly as possible the true vocational nature of the field from which it is taken. Each plate is located in its proper and regular sequence. On completion of any learning unit or plate the student may change from one engineering field to another and the next learning difficulty will be the same, the only change being in the nature of the problem. That is, he may change from sheet metal to machine design or to architectural design, etc., without loss of time or effort since he is mastering the foundation work common to them all.

Common Problems

Can he draw quickly, easily and intelligibly a sketch of the route from school to his home? It, or a like sketch, will often be necessary. Can he put together a number of lines and a few figures so intelligently that the carpenter, the gardener, or the cement pavement layer he employs can do the job with some assurance of its being correct? Can he use the scale of distances on the map? It should be learned in the geography class, but may have been omitted; learned or omitted, it may be practiced in the drawing room with profit. Can he read a blue print of the house he hopes to build or discuss helpfully the prints for a friend's house? How few can! These and a hundred other questions of like nature we must ask and answer when we consider the course to be pursued in the drawing room. Not every boy will be a surveyor, engineer or builder, but all will need the ability to express themselves or interpret the ideas of others as expressed in lines. Our course must aid them to do better the things they will do anyhow.

In this mastery of fundamentals the psychological dictum must be borne in mind that pleasing situations resulting in pleasing reactions are desired—that it is natural to avoid unpleasant situations resulting in displeasing reactions. It is mandatory that the atmosphere of the drawing room, teeming with native fascination, be redolent of pleasing situations, to the end that the student reacting with pleasure and profit seeks to repeat his experiences, gaining ever greater profit and pleasure.

Other Objectives

Clearness of expression, exactness in adherence to rule, patience in achievement, neatness in performance are aims worthy of serious thought. I firmly believe that our course may and can build character; that the habits and skills acquired or developed in our companionship *do* carry over into other studies and into out-of-school life. Preeminently on the shop teacher's shoulder rests the great responsibility of impressing upon the boys the dignity of labor; that there exists the necessity for painstaking effort if satisfaction is to result; that the average man on the average job has developed considerable skill and no little technical knowledge. An intelligent appreciation of these facts and a cooperative attitude toward the men and women who work for and with them are necessary if our boys are to become the useful citizens and socially minded neighbors we are striving to produce.

Trade-Extension Course in Designing and Cutting for Tailors

An evening class for employed journeymen tailors was organized in connection with the vocational education program of the Long Beach public schools in January, 1929, on a trade-extension basis. At a regular meeting of the tailors' union, Local No. 255, the question was raised as to the need for extension courses to train a worker to meet the more difficult demands of his present job, as well as to prepare him for promotion to a more advanced position. The discussion indicated that the men were experiencing little difficulty in the purely manipulative aspects of their trade but that there was a decided need for a course in designing, in laying out of patterns, and in cutting. Upon investigation it was found that a course of the nature desired was not to be procured in any institution west of Chicago, and that eastern institutions charged up to \$500 for a six-weeks' course. At the meeting mentioned, about fifty tailors had expressed their desire and willingness to enroll in such a course if the board of education would make it available.

The Instructor

The teacher problem is of paramount importance in determining the success or failure of such a course. The teacher must be thoroughly familiar with the constructional aspects of the tailoring trade and in addition must be an expert in the unit or units chosen for the course. The procedure in securing the teacher with these qualifications was as follows: the union was requested to submit to the Director of Vocational Education the names of three of the outstanding tailors of the city who, in its judgment, were most competent to teach the selected unit. They were informed that the schools would probably elect one of the three, taking into consideration both technical and personal qualifications. Mr. Carl Liedholm, a man of thirty years' experience in the trade who has been conducting one of the leading exclusive tailoring establishments in Long Beach for many years, was prevailed upon to accept the position as teacher even though it meant considerable financial loss to devote his evenings to this purpose.

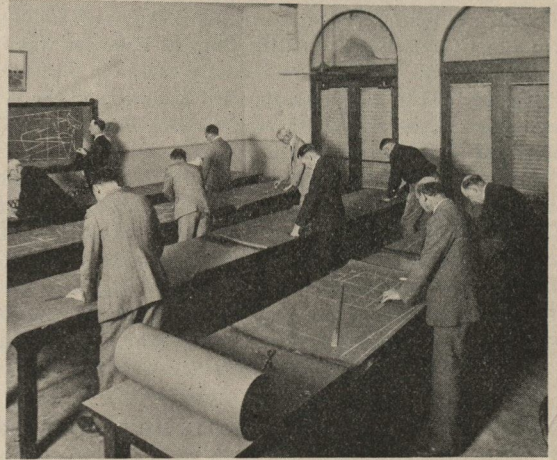
Enrollment

Since its organization in 1929 the class has been in session each week with an average enrollment of twenty. During this time no single individual has been a member of the class who has not already attained the status of journeyman tailor. It is also of interest to note that more than 50 per cent of the class travels each evening from Los Angeles to Long Beach, an average distance of more than twenty-five miles, or a total of fifty miles each evening.

Content of Course

The content of the course was determined by trade analysis and is strictly concerned with the unit selected. The equipment for the class is exceedingly simple. Each student is provided with a table of not less than 2' x 5' for the laying out of materials and patterns for design purposes. Each student brings a piece of cloth to use as a pad together with a tailor's square and a pair of scissors. The supplies consist solely of an occasional roll of cheap

wrapping paper. During the two years which the class has been in session the total cost of supplies has probably not been more than ten dollars—certainly the least expensive trade-extension unit that has been offered by the vocational department. It is also one of the most efficient courses since 100 per cent of those enrolled proceed to use the materials immediately in their daily tasks.



Results of Course

The course is organized into units of forty hours. The student mortality during each course and during the two years has been practically zero. Since the course began many of the men have started in business for themselves while others have been promoted to better positions. It is also of interest to note that those who have taken the course have been in constant employment. The members of the class have freely expressed themselves to the effect that the training acquired in the tailoring class has contributed much to their employment stability.

—FREDERICK HORRIDGE.

Granite Cutting Taught

A unique course has just been organized for the granite-cutting industry in the Raymond Granite Union High School in cooperation with the McGilvray-Raymond Corporation, producers of granite.

About a week after the opening of the fall term in the Raymond Granite Union High School, Mr. McGilvray of the McGilvray-Raymond Corporation stated to the principal, Walter C. Hixson, that he was interested in starting apprentice training for a number of selected young men. He had applied to the Federal Board for Vocational Education and had secured their literature, including Bulletin 137 on granite cutting. He was willing to establish a program of training at his own expense if there was no way of securing state aid. He said that there was no apprentice training in the west, and that drifting journeymen had to be classed as improvers, and paid according to production; that trained stonecutters were becoming scarce, due to the death of older men and the change in occupation of others; and that their quarries needed a continuous supply to keep up with production.

A communication was sent to Mr. Beswick, state supervisor of trade and industrial education, on October first,

inquiring into the possibility of establishing vocational courses in the granite-cutting industry. A date for a visit of inspection was set for October 15, and later moved to November 5. In the interval the quarry management made a careful survey of their men and of space available for instruction. Two groups were selected, twenty journeymen in one and twenty apprentices in the other.

On the appointed date, Mr. Beswick spent two days in Raymond in conference with Mr. McGilvray and his engineers and foremen. The entire plant at Knowles was inspected and the needs of the industry carefully measured. It was decided to select Mr. Bernard Anderson as the best available instructor and to start classes immediately in blueprint and diagram reading.

An application was made to the State Board of Education for a credential for Mr. Anderson in blueprint and diagram reading, stone cutting, and associated skills. Work for a three-year course was outlined by Mr. McGilvray; a classroom was prepared; and two classes were organized, one for apprentices only, as apprentice training, and another for journeymen and improvers, as trade-extension training.

Instruction started for apprentice training on December first at Knowles Recreation Hall. The class was to have a two-hour session. On the following night instruction started in trade-extension training, for a similar period. These courses have continued to date with almost perfect attendance, one night a week.

Later in the month increased orders for cut stone put every available man to work. On January 5, six new apprentices were selected, from boys employed around the cutting sheds in varying capacities, to start to cut stone. It was arranged that all apprentices should attend a newly organized class in the evening, for which the chief foreman selected a skilled stonecutter to instruct these new apprentices in making beginning cuts. In this class some group instruction was given, but most of the instruction was individual.

This new demand for instruction in the stone-cutting trade led to the application by the high school to the Bureau of Trade and Industrial Education for additional help in organizing a day class for full-time or part-time attendance in stone cutting.—W. C. HIXSON.

Continuation Education As England Sees It

By SARAH B. CROSBY*

Continuation education is receiving a great deal of attention in England at present as shown by the report of the National Advisory Council for Junior Employment in England and Wales, and by the section of the Unemployment Insurance Act of 1930, dealing with "Provision of improved courses of instruction for persons under 18." This act provides that the receipt of unemployment benefit by all juveniles under the age of 18 is dependent upon daily attendance in approved classes in the day continuation schools or in other approved classes.

The chairman of the National Advisory Council which recommended this legislation was the Rt. Hon. the Earl of Shaftesbury. Members of the committee represented the local education authorities, employers, trade unions, the teaching profession, and the Ministry of Labor.¹

Lord Eustace Percy,² in a recently collected series of addresses,³ presents the following picture of the attitude of progressive England toward continuation education:

"It will gradually become the usual thing for a pupil who leaves school not later than sixteen to pass directly into a part-time course at a technical school or college, or into a 'continuation' class preparatory to such a course as naturally as the pupil who stays beyond that age at a secondary or public school passes on to the university. The school-leaving age may or may not be raised by compulsion but it will, in any case, tend steadily to rise."⁴

* Miss Crosby, who is on leave from the San Diego Continuation School, recently spent two months in England visiting continuation schools and talking with leaders in this field of education.

¹ National Advisory Council for Junior Employment. Third Report. London, H. M. S. O., 1930.

² Parliamentary secretary of education, 1923; president of the Board of Education of England and Wales, 1924-29.

³ Percy, Lord Eustace. *Education at the Crossroads*. Evans Brothers, Ltd., Russell Square, London, W. C. 1, 1930.

Young persons who have left school may or may not be compelled to attend continuation classes⁵ but attendance at such classes will, in any case, be required by an increasing number of employers."⁶

Behind this scheme for continued education in England there is a clearly thought out philosophy which is providing the guide posts for this comparatively new venture in the field of education. At the seasonal closing of the Bournville Day Continuation School last July Mr. George Cadbury⁷ expressed the keynote of this philosophy when he stated that teaching young people to be citizens who would strive to understand the problems of today was the sole reason for having continuation schools.

Lord Percy further points out that: "The aim of all education is to teach men to think."⁸ He concludes his discussion of this point by explaining: "Where the general view about technical colleges [referring to the schools and colleges which would provide continuation education] goes wrong is that it assumes that they aim simply at teaching a man to *know* his job. They do not, or at least they should not; they should aim at teaching a man (or boy or girl) to *think* about his (or her) job."⁹

Along this line of thought a paragraph from the foreword of the Educational and Social Programme of the Royal Arsenal Cooperative Society (one of the four great cooperative societies of London) for 1930-31 might be

⁴ The school-leaving age has been 14; however, there was a bill before Parliament last year which would raise the age to 15.

⁵ The Fisher Act which refers to continuation education is a permissive act at present.

⁶ Percy. *Loc. cit.*, p. 2.

⁷ Member of the firm of Cadbury Brothers, owners of the chocolate factory at Bournville, Birmingham.

⁸ Percy. *Loc. cit.*, p. 62.

⁹ *Ibid.*, p. 63.

quoted. The following paragraph in some measure explains why this branch of one of the greatest industrial and commercial organizations in all the world (The British Cooperative Society, Ltd.) considers continuation education worthwhile:

"Among the many facts that the general public does not know about the cooperative movement, the most striking is that from its earliest beginnings the movement has never been concerned with trade and manufacture for their own sake. Always, even when working people in the mass were much poorer than they now are, cooperation stood for more than merely saving money. Money was saved with the object of living a fuller life, and the best cooperators have lived the fullest lives they could on the money they could afford. The delusion that people can first make themselves comfortable, and then become cultured, is not so common amongst cooperators as amongst some other classes."

It is interesting to note in regard to the cooperative movement (which has developed and grown almost unbelievably in the last hundred years) that so far as the society is generally concerned two and one-half per cent of its net profits are devoted to education. In the case of the Royal Arsenal Cooperative Society this amounts to approximately £16,000 annually. Some 400 classes are held in conjunction with the education office of the London County Council, and all of the boys (up to the age of 17 years) working for the R. A. C. S. in the grocery and provision departments attend on two half days a week the Vocational Training Schools of the London County Council.

The following quotations from the report on the Day Continuation Classes of the Staff Training College at Port Sunlight, given by Mr. J. Knox¹⁰ before the annual meeting of the Association for Education in Industry and Commerce in June, 1930, are of interest:

"So far as we are able to judge, by testimony which has come from many quarters, young workers who have attended our classes are quicker to learn, more open minded, easier to deal with, and need less supervision than workers whose education becomes a closed book when they are fourteen years of age. The parents also appreciate the continued education given their children, and even in the family, the young people who have been in our school have an influence on the household for good that the parents are often thankful for." He further states: "We are far from regarding education as purely a matter of imparting information; what we try to do is to provide an environment containing the elements deemed necessary for the best types of human growth. Knowledge is associated with life, and companionship in school with young people of like age and similar human interests, furnishes the surroundings sympathetic to the spirit of happiness and the growth of the best qualities that one expects to see, and enjoys seeing, in young people."

Mr. Knox concluded his report with the following paragraph: "The continuation-school system has been tried in a great variety of factories and places without undue dislocation [to factory organization], and experience shows

in this connection that 'where there is a will, there is a way.' So far as our company is concerned our experience has amply justified the expenditure, and we are glad to have been able to participate in providing young workers with a certain amount of leisure time in their working day for education during the early years of their employment, and giving them the feeling that they, too, are educated people, and that they have acquired a certain amount of discipline of mind and knowledge which will fit them for the proper enjoyment of life, and for the larger responsibilities of industry in any country, and at the same time enlightening them in the principles of industrial economics and social life."

In connection with the first part of the paragraph just quoted the two following statements by Lord Eustace Percy provide corroboration and an interesting bit of insight into the possible future of continuation education in England:

"There is a growing tendency in some industries . . . to encourage and even require attendance at day classes during working hours as an integral part of the apprenticeship arrangement of the industry. On the development of this tendency depends the whole future of the technical education of this country."¹¹

In concluding it is interesting to note that the fundamental idea upon which continuation education in England is being built can be summed up in the apt sentence, with regard to vocational education, of Dr. Vierling Kersey, California state superintendent of public instruction: "It isn't a question of aptitudes but of attitudes."¹² Knowing a job is important; however, the importance of knowing a job recedes almost to the vanishing point if the young worker, or prospective worker, has not learned to think about his job and its relation to the world outside the shop, factory, or office. This is the problem that thoughtful men and women in the field of education in England consider of vital importance. Following the line of thinking of other leaders in educational philosophy, England's ex-minister of education reminds us that "behind this educational problem lies the supreme social problem of today."¹³

Carpentry Mathematics

"Carpentry Mathematics" is the title of a new book recently published by McGraw-Hill Book Company and prepared by J. Douglas Wilson, head of the building trades department of Frank Wiggins Trade School, assisted by Clell M. Rogers of Venice High School. Although the primary objective of the book is the teaching of mathematics as applied to the carpentry trade, it is, as well, a general presentation of the field of elementary and applied mathematics in such form that it would be of intense interest to any young man. It is written in a language that a young man could not help but enjoy and is illustrated with live material from the trade field.—Faculty Facts and Fiction (Los Angeles), Nov. 25, 1930.

¹⁰ Percy. *Loc. cit.*, p. 67.

¹¹ From a course on "Organization and Administration of Vocational Education," Stanford University, Summer quarter, 1928.

¹² Percy. *Loc. cit.*, p. 60.

¹³ Mr. Knox, the honorary secretary of the Association for Education in Industry and Commerce, is principal of the Staff Training College of Lever Brothers, Ltd., of Port Sunlight, manufacturers of "Lux" and "Sunlight" soap.

CALIFORNIA VOCATIONAL NEWS NOTES

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OUR NEW NAME

With Volume IV, No. 1, published in November, 1930, this publication assumed a new name: *California Vocational News Notes*, instead of *Vocational Education News Notes*. Regular dates of publication for the three yearly issues have also been fixed, namely: November, February, and May. The volume runs biennially.

WE CAN HELP

In the problem of unemployment, vocational education and vocational guidance are being recognized as definite relief measures. This is brought out in an article, "Three Cities Look Ahead," by Beulah Amidon, in *The Survey*, February 1, 1931, from which the following excerpts are printed:

"After talking with industrial leaders, bankers, merchants, social workers, municipal authorities, personnel directors, economists, jobless men and women in these three cities [Cincinnati, Rochester, and Indianapolis], I should like to draw a picture of 'what can be done about employment' as a five-spoked wheel.

"Its rim is public education—an honest, informed community aware of what unemployment means to us as individuals and as members of a group, and the most hopeful means of dealing with the problem.

"The hub would be a permanent community organization, functioning in brisk times and in slow, as continuous and as carefully adapted to local needs as is the public health set-up. And the spokes of my wheel I should label: fact-finding, to enable the community to analyze and understand its own situation; stabilization of local industries, to reduce the amount of unemployment; employment services, to connect men and jobs with the least possible delay; vocational guidance and training, to equip people for definite fields of work, and to steer them (particularly the younger ones) toward the occupations where there are likely to be 'men wanted'; relief and reserves, to cushion for the worker the burden of unavoidable periods of part-time work or of unemployment.

"While this is a logical order of procedure from the standpoint of prevention, emergency relief committees have taken hold of the tail. They must face about in reconstructing and continuing their work from the standpoint not of the emergency but of the long problem. . . .

"If one were to visualize the objectives ahead of these local commissions, once the whole wheel of their program were turning, it would be something like this:

"A community which would know each month, if not each day, not only the extent of its unemployment, but its opportunities and prospects of employment.

"A community in which the public utilities, the manufacturing establishments, the building contractors, and so on, would be as conscious of the need for stabilization as they are now of the need for industrial safety. . . .

"A community with an employment service as effective as its fire department, its post office, its banks, or its insurance offices.

"A community with a long range program for budgeting its public works over a ten-year period, so that city, county, school-board, sanitary projects can be thrown in when industrial operations fall off.

"A community with adequate opportunity for broad vocational training as well as for acquiring isolated technical skills, and in which school children and their parents and teachers use to the full a comprehensive vocational guidance and counseling program.

"A community which has thought through its relief program, and which has reconsidered the responsibility which its industries, its well-to-do citizens, its social agencies, its tax funds, and its wage-earners' households bear toward carrying the risk of broken work due to industrial causes.

"A community which will have, through it all, a permanent set-up, dealing with employment plans and problems, as competent and as adequately staffed and financed as its health or educational set-up."



CALIFORNIA VOCATIONAL FEDERATION

OFFICERS OF THE C. V. F.

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 First Vice-President—M. N. Smith, Glendale High School
 Second Vice-President—J. E. Carpenter, Sacramento Continuation High School
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The Administrative Council Meets

New life has been put into the C. V. F. by the activities of the Administrative Council in attacking a large number of problems confronting the vocational teachers of our state and nation. It has been demonstrated to all teachers who have read copies of the minutes of the Council meetings that we have in that body and in its method of procedure something to command our respect and full support.

A glance over the list of names of men and women who make up the membership of the Council indicates that California vocational teachers have at their service this year a group of school people who have been known, individually, for many years, as unselfish and conscientious workers in the interest of their fellow teachers and the public schools of this state. The new plan under which the Administrative Council members are elected has brought together in this group of men and women who are the chosen leaders of their particular teacher-group or section an administrative body of the highest ability and the widest range of representation.

Plan of Organization

To those who have not followed the plan of reorganization as effected at the annual convention last summer let me say that our Administrative Council is made up of the president and two other representatives of each of the federated associations; for example, two delegates from the agricultural teachers association, from the continuation education teachers association, from the industrial arts and trade teachers association, from the Pacific School of the Air, from the rehabilitation teachers association, and from all other affiliated associations; also the presidents of the six geographical sections of the C. V. F., and the two last past-presidents of the C. V. F. These make up a truly representative and carefully selected group of nearly thirty men and women.

Plan of Meetings

A new departure in meetings, and an innovation that has met with widespread approval, is that of holding the Administrative Council meetings in connection with geographical section meetings with from one hundred to two hundred persons in attendance at the combined meetings. The Southern Section is now planning to eclipse all other records for the year by having an attendance of over three hundred teachers at the council and section meeting to be held in Los Angeles in April. Such meetings will soon rank in importance second only to our annual con-

vention meetings. They will certainly be highly inspirational to such cities and sections as play host to the Administrative Council.

Three large meetings are held each year. At one time the meeting is in one of the two northern geographical sections and convenient to both of them; at another time it is in one of the central sections; and the third time it is held in the southern part of the state. An organization meeting of the Administrative Council must be held each year at the annual convention and following the election of officers of the federated associations; a final meeting to close the year's work must be held at the time of the next annual convention the following summer.

Report of November Meeting

The most recent meeting of the Council was that held at Fresno, November 8, at the time of the Central Section meeting in that city. Much business was transacted and has been reported to the various groups and sections by copies of the secretary's minutes mailed to the officers. Some of the most important business transacted related to the new constitution and its interpretation in regard to sectional organizations and finance, associate members and active members, official organization charts, and proposed amendments. There was considerable discussion of state legislation rumored and proposed that may affect vocational teachers very decidedly. A motion prevailed that the president of the C. V. F. be authorized to sit in on the legislative committees to further vocational welfare. The committee on editing and statistics was directed to assemble miscellaneous data for the use of the officers and the affiliated groups. Relations with the A. V. A. and the method of payment of dues to the national organization was decided upon. The president was authorized to name the C. V. F. delegates to the A. V. A. convention to be held December 10-13, in Milwaukee.

Spirited discussion arose over the preliminary report of the National Advisory Committee on Education, a federal committee sometimes called the "Wilbur Committee" or the "Committee of 52." The report indicates that this committee may propose legislation very unsatisfactory to vocational teachers and administrators, and may succeed in diverting into other channels federal funds now being appropriated for vocational education. Dr. Nicholas Ricciardi and Mr. J. C. Beswick both warned the Council to keep fully informed of proposals that may be made by the federal committee and recommended close cooperation with the A. V. A. in action on the committee's report. The president, the secretary, and the committee on editing and statistics were instructed to get copies of the report and information from the A. V. A. committee studying it and make these available to the officers of the C. V. F. sections.

At the close of their business meeting the Administrative Council members united with members of the Central Section, representatives of the State Department of Education and of the City Department of Education at a luncheon at Hotel Californian. Mr. L. E. Stockwell served as toastmaster; Miss Maude I. Murchie, Dr. Nicholas Ricciardi, Mr. J. C. Beswick, Mr. H. D. Hicker, and Mr. Paul M. Pitman were speakers. After the luncheon those present assembled in various meeting rooms according to the groups with which they were affiliated and discussed

group problems and business. In the evening the groups came together again in a banquet presided over by Mr. R. F. Aspinall. Mr. O. S. Hubbard, city superintendent of schools of Fresno, welcomed the educators gathered together in his city with Dr. Ricciardi as principal speaker. Details of the luncheon and banquet programs and of the afternoon section meetings are reported elsewhere in the *News Notes*.

The next meeting of the Administrative Council is scheduled to be held in Los Angeles on Saturday, April 18, at the time of the spring meeting of the Southern Section. This promises to be a very important meeting because of the volume of unfinished and new business to be transacted, relating to the state and the national organizations, and of the reports from delegates to the A. V. A. convention to be heard and acted upon. Important new business will be arrangements for the annual convention to be held in Los Angeles, just preceding the National Education Association convention in that city. Mr. M. N. Smith, of Glendale, and Mr. F. E. Brooks, of Huntington Beach, are in charge of arrangements for the April meeting.

United We Stand

The California Vocational Federation is a reality. The opportunity is here for every teacher of every branch or special field touched by it to ally himself with his own particular group and lend his strength to the program of this Federation. With officers upon whom we can depend, this new organization which was perfected last summer at the San Jose meeting promises soon to be a worthy representative of the interests and ambitions of progressive California teachers.

Memberships Needed

The officers, however, cannot accomplish this end, alone. If the C. V. F. is to be a successful organization, the rank and file of teachers must contribute to that success. And such contribution must come in at least two ways. The first is through memberships. According to the new constitution associate membership may be gained in the C. V. F. upon payment of fifty cents. No person who claims to be professionally minded in the least degree will suggest that the price keeps him from joining. The active membership, costing \$1.50 and carrying with it affiliation with the American Vocational Association, should be the consideration of every teacher in the various fields covered by the Federation.

Membership may be had either through sectional or group organizations or by direct application to the secretary of the C. V. F. California teachers of special subjects who are rated high from the standpoint of preparation for their work and quality of work accomplished, cannot afford to lag in the matter of professional cooperation with one another through a strong, statewide organization or through affiliation with the A. V. A.

Active Interest Needed

The second way in which teachers can contribute to the success of the C. V. F. is through an active interest in its program expressed through assistance in shaping the program. A large membership is imperative for the success of the Federation; but counting members alone will not greatly promote vocational education, or its philosophy, or the scope of its service in the schools of California.

The new constitution of the C. V. F. is comprehensive in plan and rich in possibilities. It contains allowances for various types of affiliated organizations. In fact, its success depends wholly upon the strength and activity of such organizations. But affiliated groups will not come into being without leadership on the part of others. Provisions are made in the constitution for at least two types of affiliated bodies: (1) Statewide associations of teachers with similar interests, as industrial education, agricultural education, continuation education, etc.; and (2) sectional organizations conforming to the geographic sections of the California Teachers' Association.

The rapid expansion within the field of so-called practical subjects in the school curricula which has been experienced during the past two decades has been largely due to the eagerness of teachers to meet for the purpose of unifying efforts and establishing cooperative relationships. The Western Arts Association, the Eastern Arts Association, the former National Society for Promotion of Industrial Education, and its companion Association of the Middle West, and now the American Vocational Association are all examples of an urgent desire on the part of like-minded men and women to unite their efforts toward broader service and toward stabilizing and standardizing the newer types of school work which they have represented, as well as to obtain for the work professional and legal recognition—national, statewide, and local in scope.

There is Work Undone

The continuous and rapid changes in attitudes toward public schools and in demands upon the programs of the school systems, the ever-present, perplexing problems in regard to courses of study, objectives, methods of obtaining results, and the satisfying of demands of industry are still potent questions. Other important problems, too numerous to mention, are constantly in the minds of far-seeing teachers. Who, in this day of rapid progress in every field of endeavor, can afford to dissociate himself from his fellows and attempt to do his work single-handed and alone? United we stand, divided—we simply don't.

E. E. ERICSON.

A DELEGATE REPORTS THE A. V. A. CONVENTION

The Milwaukee convention of the American Vocational Association was attended by a delegation of twelve from California. The following persons made up the group:

- Mrs. M. A. Larkey, department of vocational education, Los Angeles Public Schools.
- Miss Hazelle Moore, vice-principal, Frank Wiggins Trade School, Los Angeles.
- Mr. B. W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles.
- Mr. H. O. Dyck, principal, Metropolitan High School, Los Angeles.
- Mr. J. C. Beswick, State Department of Education, Sacramento.
- Miss Maude I. Murchie, State Department of Education, Sacramento.
- Dr. Emily G. Palmer, University of California, Berkeley.
- Miss Ilma Badgley, University of California, Berkeley.
- Mr. B. E. Mallary, University of California, Berkeley.
- Mr. G. C. Mann, director of vocational education, Berkeley Public Schools.

Mr. L. W. Travers, director adult and continuation education, Oakland.

Mr. J. E. Carpenter, director adult and continuation education, Sacramento.

Probably the California delegation was as large as any at the convention, considering the distance from Milwaukee.

Mr. John C. Beswick was the only life member of the American Vocational Association at the Milwaukee convention from California. Twenty-three life members were honored by having a special table in the center of the banquet hall at the annual banquet meeting. At this banquet an additional list of sixty-three life memberships were announced, sixty of which came from Wisconsin as a tribute to the retiring president, Paul W. Chapman, who has labored earnestly to promote the idea of life memberships in the association. Mr. Beswick made the trip from Los Angeles to Milwaukee for the A. V. A. convention and return, by airplane. He may have been in the air coming and going, but very decidedly had his feet on the ground while in Milwaukee.

Three section meetings on continuation or part-time education were held in connection with the American Vocational Association meeting in Milwaukee, December 10 to 13. The first section was retrospective in character, five speakers covering briefly the history of part-time education as follows: Wisconsin, Mr. G. P. Hambrecht; Massachusetts, Mr. R. O. Small; Pennsylvania, Mr. L. H. Dennis; New York, Mr. L. A. Wilson; California, Mr. J. E. Carpenter.

Friday morning's meeting considered the problems of coordination in continuation education. Mr. J. Ray Stine of Akron, Ohio, presented a very thorough study of present practice in coordination. This study should appear in print for the benefit of all the people concerned in this field. Following Mr. Stine's paper, Mr. Oakley Furney of New York State led a discussion of problems in coordination.

On Saturday morning, the future of continuation education came in for discussion with contributions from several leaders in the field in Wisconsin, followed by Dr. R. L. Cooley who spoke on the topic, "The Continuation School Twenty Years Hence."

The West was recognized in the official organization in the American Vocational Association for the coming year by the election of Mr. C. M. Miller of Kansas City as president, and the election of Mr. I. S. Noall, state supervisor of trade and industrial education for Utah, as a vice-president. Mr. Noall is well and favorably known in California, and his election is a matter of great satisfaction to his friends. He will hold office for three years.

Perhaps the most important official action taken by the House of Delegates of the American Vocational Association at Milwaukee was the passage of a resolution which had been prepared by the committee under the chairmanship of Mr. G. P. Hambrecht of Wisconsin. This resolution opposed in the most vigorous terms the recommendations made by the national advisory committee on education in its pamphlet, "Federal Relations to Education." As is probably well known to readers of the *News Notes*, this committee, appointed by President Hoover a year ago, recommends the withdrawal of all federal subsidies to specific phases of education as involved in the Smith-Hughes Act. The A. V. A. went on record as unanimously opposed to the withdrawal of subsidies at the present time.—J. E. CARPENTER.

Activity in Guidance Work

Central Section.—Interest in guidance seems to be developing rapidly with much evidence of activity along that line from many sources within our own state. Of particular significance is a series of field conferences of deans and counselors sponsored by the State Department of Education, directed to the producing of a handbook for counselors. At a conference in Monterey a year ago, it was unanimously agreed that a handbook for counselors would be of practical value not only to high school counselors, but also to school administrators and teachers, particularly if it were the outcome of a series of field conferences. The conferences began with Dr. Ricciardi as leader and will be continued until the handbook has been produced.

Glendale.—More than forty teachers of the Glendale schools are holding a regular series of conferences on guidance under the leadership of Dr. V. G. Bennett of the University of Southern California. The philosophy and theory of guidance and occupational study are being applied to the local situation as a project, with the aim of working out a plan to be put into operation.

Southern Section.—The Vocational Guidance Association of Southern California is holding regular monthly meetings, as well as putting on a series of programs during the institute sessions of the C. T. A. Principals, teachers of occupations, counselors, university instructors, Y.M.C.A. leaders, and business men are participating in the work of the association.

Santa Barbara.—In Santa Barbara, a group composed of teachers, counselors, directors, deans and principals, is holding a series of bi-monthly meetings for the purpose of studying local guidance needs. The committee met during the second half of last year, as well as the first semester of this year, and is now beginning to shape a definite program for guidance. Effort is being made to arrive at a conclusion as to what can be done in the way of group instruction for guidance, personal counseling, home contacts, case studies, follow-up after school, and records.

ROY L. SOULES.

FUTURE SHOP TEACHERS GIVEN ADVICE

In a talk to teachers in training at the Santa Barbara State Teachers College, Claude E. Nihart gave sound advice that will prove equally valuable to teachers who are on the job. The occasion of the presentation was the semi-annual banquet of the industrial education department on January ninth. Mr. Nihart, who is supervisor of industrial arts in the Los Angeles public schools, presented certain facts which he has accumulated in his dealings with hundreds of shop teachers, both novices and experienced men.

Needs of instructors.—The two most frequent shortcomings of shop teachers, pointed out by the speaker, are lack of a definite plan for procedure when the instructor first meets the class, and weakness in discipline. The suggested remedy for the first of these difficulties was that teachers—young instructors in particular—should take care to provide themselves with ample teaching material

in order to be independent of assistance for some time after their work begins. Such material should consist of drawings of projects, job sheets, etc. In elaborating upon the second difficulty, the speaker emphasized the necessity for good discipline as a prerequisite for good work in the shop, with the teacher in control at all times.

Over-working the job sheet.—A word of caution was directed against over-working the job sheet as a substitute for teaching activity, and still another point was made against the tendency of some teachers to abandon the demonstration plan of teaching and substitute for it the lecture method. To explain how a thing is done is not a worthy substitute for showing it by demonstration, as far as the pupil is concerned.

Tool processes alone insufficient.—To know tool processes is not alone sufficient as a background for teaching, according to Mr. Nihart. Every teacher of shop work should at all times be familiar with the underlying objectives in connection with his work and should know the "why" as well as the "how." He should be able to enlighten the casual visitor to his shop with regard to reasons for teaching the work and the outcomes which are expected from such teaching.

Appearance of shop.—That the physical appearance of a school shop gives evidence as to the efficiency of the teacher was also stressed. Organization of equipment and materials and the order in which they are kept will tell in unmistakable language whether a teacher is taking advantage of all his opportunities to assist the boy in becoming properly adjusted to his environment.

E. E. ERICSON.

NORTHERN CONTINUATION EDUCATION ASSOCIATION MEETS

The Northern California Continuation Education Association held its semi-annual meeting as a section of the Bay Counties Institute on Wednesday, December 17. The meeting took the form of a luncheon and afternoon session combined, held at the Clift Hotel in San Francisco, with 164 persons present.

Dr. Frederick P. Woellner spoke on the topic, "The Teacher as a Social Engineer," stressing three main points:

1. Continuation education has already been the means of salvaging a large group for education.
2. Education never ends.
3. Education must be concrete.

Dr. Woellner had much to say for the fine group of young people who simply will not go to the academic, ritualistic school and whose service to society is salvaged through the continuation school. Continuation schools, he declared, are building a model of procedure which has already been adopted quite generally in other schools. He suggested the slogan, "A Blueprint for Every 'Kid'," meaning that each pupil should be studied as an individual and furnished the opportunity for development along the lines for which he is best adapted.

Mr. F. C. Weber of Los Angeles brought greetings from the southern association; Mr. A. E. Paine of Huntington Park, president of the state association of continuation-school teachers, presented the organization scheme

for that association, which was ratified; discussion of social guidance problems in the continuation high school was led by Mr. E. E. Crook of Watsonville, Miss Mary McTighe of San Jose, Miss Myra Green of San Francisco, Mr. A. G. Smith of San Francisco, and Mr. H. N. McClellan of Berkeley. Mr. J. E. Carpenter of Sacramento acted as chairman. Plans for the meeting were made by Miss Nell Skeoch, vice-president of the association; Mr. E. W. Locher, secretary; Mrs. Marie Kerwin, chairman of the luncheon committee, and the other members of the faculty of the San Francisco Continuation High School.

J. E. CARPENTER.

Chester Rowell Addresses Southern Section

A very successful dinner meeting of the C. V. F. Southern Section was held at Institute time, with nearly four hundred men and women in attendance. The banquet and meeting was held in the dining-room of the City Club, Los Angeles, on Wednesday evening, December 17. Benj. W. Johnson, as toastmaster, saw to it that there were no dull moments during the three delightful hours of fellowship and entertainment.

The address of the evening was given by Hon. Chester Rowell whose subject was "The Place of Vocational Education in Our Changing Civilization." He spoke of vocational and educational questions of the present day and especially of the present generation's problems arising out of machine progress, mass-production, and unemployment. It is an age, he reminded us, in which we must train for work, train for life, and train for a greater leisure than ever before. We are in an age of rapid change such as human beings have never known before—one in which men now living have seen the ox cart replaced by the railroad, the railway train surpassed in speed and general use by the automobile, and the airplane now rapidly coming into favor—an age in which in one generation we have gone from the pony express to the telegraph, the telephone, and to the radio with almost instantaneous communication to any country on earth. Change goes rapidly onward, new vocations develop by the hundreds, machines replace men in many industries, we have an enormous unemployment problem, and are confronted with the five-day week and the six-hour day as a means of giving more men a chance to work. Workers must be trained and retrained to keep up with the progress of the age. There are problems of employment and problems of leisure, both fields needing the attention of educators, the speaker said.

An introduction of guests and vocational teachers from outside the city of Los Angeles showed an excellent representation from all that part of the state from Santa Barbara southward.

N. E. A. booklet.—The South Regional Committee on Continuation Education, of which Mr. F. C. Weber is chairman, held a meeting January third and decided upon certain information which should be gathered for a booklet to be distributed at the N. E. A. meeting next July in Los Angeles. A questionnaire has been sent to all continuation schools, which will furnish data for the booklet.

BOYS BUILD ATTRACTIVE HOUSES

The vocational carpentry class of the Riverside Polytechnic High School under the direction of E. B. Cordell has for several years built substantial, attractive houses for residents of Riverside. One of the houses built last year appears in the accompanying cut. This is a five-room house, built for E. L. Koethen, and is located on Ramona Drive.



The electric wiring in this house, as in all the homes built by the vocational classes of this school, was done by the boys who are in the electrical trade class of which R. H. Ingersoll is the instructor. The house was wired for an electric range and the owner received a red seal certificate when the work was inspected. During the present school year two more houses are being built, one a two-story house and the other a story and a half.

Central Coast Section Meets

Special meetings were held by the Central Coast Section of the C. V. F. during Institute week. Three forenoons were devoted exclusively to the interest of shop teachers and to the discussion of their problems. E. E. Ericson, director of the division of industrial education, Santa Barbara State Teachers College, was the first speaker at these conferences of shop teachers. His topics were: (1) "Extra-Vocational Values in Industrial Arts and Vocational Education"; (2) "Men and Machines"; (3) "Some Unsolved Problems in the Field of Industrial Education."

The problems for conference and discussion by the group were selected by majority vote of the men present. Lively discussions resulted from this method of procedure.

Roy W. Frisbee, head of the department of vocational education at Monterey Union High School, was scheduled to be group leader, but, due to his illness, Forest E. Peifer of the same school was the discussion leader.

Ricciardi Speaks

The honor guest and speaker at the annual evening dinner by this group was Dr. Nicholas Ricciardi, chief of division of city secondary schools for the state of California. In his address to the group Dr. Ricciardi stressed the necessity of placing emphasis upon the social adjustment as well as trade skill in the teaching of vocational classes. The latter of these is a common objective, the former is not so often stressed in the minds of teachers.

To train workmen who can adjust themselves to conditions under which they must work and live is equally

important with the training that leads toward high-grade skill, according to Dr. Ricciardi. The hours of leisure which the future worker must spend in some way should concern the shop teacher. Habits of thinking and mental attitudes are developed in the school shop and under the influence of the instructor of this work. Dr. Ricciardi's address was enjoyed to the fullest and did much to widen the horizon of teachers who are prone to consider themselves specialists in a particular field.

Section Organizes

At the final meeting of the group the question of a permanent organization and affiliation with the California Vocational Federation came up for discussion. This discussion led to the election of officers, as follows: president, F. E. Peifer, Monterey Union High School; secretary-treasurer, L. E. Wormley, Monterey.

It was decided to hold periodical Saturday luncheon meetings during the remainder of the school year, and to invite some outstanding speaker for each of these meetings.

Continuation News Items

Breakfast Club.—A home-economics class in the Wilmington Branch of the Metropolitan Continuation School of Los Angeles has formed a Breakfast Club which one morning a week prepares and serves a breakfast for the class. The study of nutrition is given real stimulus by this activity. Mrs. Mae B. Kuenzel is responsible for this innovation.

Lesson sheets.—The number of continuation schools attempting to adapt their instruction exactly to the great variety of pupils attending is gradually increasing. Sacramento Continuation High School, which has for some time given up all class instruction and made individual projects or lesson sheets, is now engaged in a new effort to increase their offerings and refine their work on lesson sheets. San Bernardino Continuation High School is another school which has no class instruction, and all instruction proceeds by individual contracts for short units. A series of lesson sheets and a growing library supply the materials for individual work. A class in industrial English in the Berkeley Continuation High School uses the literature of the occupation as a basis for reading. As no two boys are engaged in exactly the same type of work they, too, have individual assignments for their specific occupations. For instance, Victor, the longshore fisherman, is reading about fish; Morris, the grocery boy, is reading about food products; and Stanley, worker in paints and varnishes, reads a "varnish catechism for varnish men" and other bulletins on varnishes, stains, fillers, and enamels.

Through these and other efforts to develop just the lessons needed by continuation-school pupils a valuable body of material should soon be available for distribution in the state.

New building.—Alhambra public schools this year opened their continuation school in a separate building which had been remodeled and adapted extremely well to serve this growing school. Mr. A. D. Stetler and his staff of four teachers in the continuation high school will be hosts to the Continuation Education Association of Southern California at their meeting on March 14.

Home citizens.—A class of boys in the Opportunity School at Huntington Park is taking a course termed "Home citizenship." The boys are showing a lively interest in the course, which is taught by Mrs. Iva Childs.

Letter to Hoover.—The following letter was sent by the advisory committee of the Huntington Park Opportunity School during December:

"The attention of our organization, known as the Part-time Advisory Board, has been particularly directed to your pronouncement at the opening session of the Commission on Child Health and Protection.

"Our organization is composed of men and women representing each of the service and civic organizations of the community, joined together under sponsorship of the High School to promote the work of the Opportunity School, a continuation school organized and conducted under the California continuation education act.

"As secretary, I have been directed to transmit to you an expression of the unanimous sentiment of our organization commending your active interest in the welfare of children and the words publicly spoken by you in their behalf, particularly on the occasion of the meeting of the commission.

"I have been further instructed to make known to the California senators and representatives our action in the matter.—Signed A. E. PAINE, Secretary."

Dr. Sotzin States Objectives of Industrial Arts

At the meeting of the Industrial Arts Section of the Bay Counties Institute, held in San Francisco in December, Dr. H. A. Sotzin, director of industrial education, San Jose State Teachers College, gave an address on "Constructing an Industrial Arts Curriculum."

Dr. Sotzin reviewed the steps in making any curriculum and discussed the sources of curriculum material. He then outlined the general objectives of an industrial arts course as follows:

1. To provide a well-balanced general education.
2. To provide for the innate constructive tendencies of children.
3. To provide the necessary training and experiences with concrete things no longer furnished by the home.
4. To give an insight into the many social, economic, and industrial problems in our present industrial civilization.
5. To develop a reasonable amount of manipulative skill and technical information, in order that individuals may care for the up-keep of the home, and buy and consume industrial products more intelligently.
6. To provide opportunities for exploring and discovering one's abilities, capacities, and aptitudes through the contacts with various basic mechanical and industrial processes.
7. To provide occupational and educational guidance opportunities through practical occupational experiences and a study of occupational life.
8. To provide opportunities for the development of avocational or recreational abilities.
9. To provide subject matter that contains a high socializing value.
10. To correlate and vitalize other school subjects.

Christmas Livestock Show

Six hundred Future Farmers from agricultural departments of forty-five different counties were guests at the Christmas Livestock Show at Los Angeles on December 5 and 6. These boys came from counties as far away as Modoc, Siskiyou, and Humboldt on the north, and San Diego and Imperial on the south. Transportation was facilitated by the cooperation of railroad companies, one railroad company allowing free transportation and others allowing one-third of the one-way fare for the round trip.

The Future Farmers formed a band, made up of agricultural students from fourteen different high schools, and were led by Mr. Mancini, director of the Modesto High School Band. While in Los Angeles the Future Farmers paraded through the main streets and were received by Mayor Porter and the city council. They were entertained at the Fat Stock Show and a course of instruction was given them in the production and marketing of livestock, including a trip through the slaughter house. A banquet was given them by the Los Angeles Chamber of Commerce. The Future Farmers exhibited two hundred head of livestock at the show and received very good prices and many prizes for the quality of their stock.

During the show a convention of Future Farmers of America was held, and each of the one hundred chapters in the state had two delegates in attendance. Some of the outstanding developments of this convention were: (1) Plans for a state Future Farmer publication; (2) promotion of a thrift campaign among the Future Farmers, with the hope that each Future Farmer in the state will start a bank account if he has not already done so; and (3) pledging cooperation with the leaders of agriculture in bettering farm prices and producing farm commodities more efficiently. Mr. Fred Robillard is state president of the Future Farmers of America and presided at the convention. Mr. Robillard is an agricultural student at the Modesto High School at the present time.

During the Livestock Show a public speaking contest was held, in which the winners of the six regional contests competed. The subject of the contest was "History and Development of the Livestock Industry in Producing a Better Meat Supply." Following are the results of the contest:

Winners	Prizes
*{1. Robert Lutz, Chaffey U. H. S., Ontario.....	\$42.50
1. Richard Stevens, San Benito Co. H. S., Hollister.....	42.50
2. Walter Ficklin, Madera H. S.	25.00
3. Richard Lommel, Calistoga H. S.	20.00
4. Henry Issel, San Juan U. H. S., Fair Oaks	15.00
5. Dean March, Shasta U. H. S., Redding	10.00
* Tie	

There was an essay contest held for the ten other western states in connection with the program at the Livestock Show. The subject for this contest was the same one as was used for the public speaking contest. The best essay from each state was sent to California to be judged. The winner of this contest was John Elliott of Brush, Colorado. He was given a free trip to the Fat Stock Show by the show management and participated in the program offered to the California Future Farmers of America. Additional prizes given to the winners of the contest ran from a first prize of \$25 to a tenth prize of \$5.

J. A. McPHEE

Signs of Progress in Vocational Agriculture in Superior California

Progress is often rather hard to measure, especially in educational work; but many activities may be taken as indications of improvement. In this region, for example, a number of activities indicate a wholesome growth in agricultural education.

1. Two new schools, Williams and Alturas, have been added to the list of federal- and state-aided schools, making the number of schools thus aided now twenty-five.

2. The agriculture and farm mechanics teachers have organized themselves into four sections or districts and hold monthly meetings to discuss their several problems.

3. Enrollment in agricultural classes increased from 550 in 1928-29 to 624 in 1929-30.

4. Agriculture teachers traveled over 35,000 miles farther in 1929-30 than in the previous year in project supervision, and made almost 500 more visits.

5. There was a falling off of seven evening classes, 112 being held, but the average attendance jumped from 21 to 23.4.

6. Fifty-five special classes were held as against 14 the year previous and the average attendance increased from 12 to 20.4.

7. Twenty-two of the 25 schools now have active Future Farmer of America chapters and the other three have already applied for chapters, or will in the very near future.

8. Many of the schools are vigorously prosecuting livestock improvement by importing high-grade pure-bred stock.

9. Four schools, for the first time, took stock to the San Francisco Fat Stock Show and made good showings.

10. Nineteen of the 25 schools took delegations to the Los Angeles Fat Stock Show.

11. At the last regional meeting recently held at Redding, a region-wide project judging contest both for agriculture and farm mechanics projects was organized and launched.

A. G. RINN.

NEWS ITEMS IN AGRICULTURE

By JULIAN A. MCPHEE, Chief, Bureau of Agricultural Education, State Department of Education

Problems of Agriculture.—The Bureau of Agricultural Education, State Department of Education, has been meeting with representatives of the Federal Farm Board for the purpose of formulating a program whereby the high school agricultural teachers of the state may cooperate with the agricultural cooperative marketing agencies. The agricultural teachers of the state will be furnished with information concerning the various cooperative marketing agencies so that they may disseminate this information to the farmers and farmers' sons in their communities. Several meetings of agricultural teachers have already been held for the purpose of carrying out this program.

Agricultural Evening Schools.—This fall there have been approximately fifty agricultural evening schools for adult farmers held by the high school agricultural teachers

throughout the state. About two thousand farmers have been given instruction in poultry, dairying, farm marketing, field crops, farm mechanics, and other agricultural subjects. It is expected that before the end of the school year five thousand of California's practical farmers will be reached through this agricultural evening school program, which is sponsored by the Bureau of Agricultural Education, State Department of Education.

Livestock and Baby Beef Show.—The California Livestock and Baby Beef Show held at South San Francisco, October 27 to 29, was very successful. The Future Farmers of America, an organization sponsored by the Bureau of Agricultural Education and consisting of agricultural students from various high schools throughout the state, showed 300 fat baby beef, hogs, and sheep at the show. At the conclusion of the exhibit these animals were auctioned off to the meat packers.

Following is a summary of the total amount of money made in prizes and for the sale of the stock by the various high-school agricultural departments:

School	Total Amount
Bakersfield, Kern County Union High	\$95.63
Elk Grove Union High	80.50
Hanford High	514.86
Hollister, San Benito County High	811.25
Lakeport, Clear Lake Union High	610.00
Lodi Union High	316.05
McArthur, Fall River Joint Union High	424.30
Modesto High	762.95
Orland Joint Union	214.20
Red Bluff Union High	1,046.70
Ripon Union High	93.75
Salinas Union High	569.45
San Luis Obispo, California Polytechnic High....	1,294.88
Santa Rosa High	1,904.63
Sebastopol, Analy Union High	95.39
Tranquillity Union High	382.35
Vacaville Union High	949.75
Willits High	133.22
Upper Lake Union High	771.13
Woodland High	1,143.33
Total	\$12,214.32

Third Annual Horticultural Contest.—Thirty teams, representing eighteen California high school chapters of Future Farmers, competed in the third annual horticultural contest at the University Farm, Davis, on November 1, 1930.

The contest is held each year under the auspices of the Horticultural Round Table, a students' organization at University Farm. The contest is becoming more important each year and a greater number of schools are taking an interest in it. The Future Farmers competing judged apples, pears, grapes, vegetables, and competed in landscape contests. The aim of the contests is to teach the students the meaning of high quality fruit and vegetables and to aid them in planning more desirable country homes.

Ag Does a Little Putting

The landscape gardening class at Patterson Union High School has been busy with an entirely new agricultural project, that of making a putting green at a local golf links. Creeping bent grass was used in this project.

COMMERCIAL ASSOCIATIONS MEET

Central Coast Section Commercial Teachers' Association

The commercial teachers of the Central Coast Section enjoyed an unusual institute program in December. For one day the teachers became pupils, with business men as their teachers. Instead of the regular classroom program progressive lessons were given.

The first lesson was at Charter's incubator factory at Santa Cruz, where Mr. S. Ellingson spoke on "The Value of Seconds and Mills in Production." The tenor of Mr. Ellingson's talk showed how the business man constantly had to raise quality and lower costs, making it necessary to save seconds of time and fractions of cents. The second lesson was given in Stikeman and Pierce grocery store. Mr. Stikeman not only showed the teachers how stock should be arranged but also explained why quality groceries in the long run were the least expensive. Mr. Stikeman concluded his talk on "Know Your Groceries" in the warehouse, giving a concrete example by opening cans of vegetables and fruits. The third classroom was held at the cement plant at Davenport, ten miles from Santa Cruz. Under the direction of Superintendent Fred H. Davis the manufacturing of cement was shown from the bringing in of trainloads of rock to the hourly testing of the finished product.

On Thursday, Pierre Vinet, sales manager of the Coast Counties Gas and Electric Company, spoke on the subject, "What Business Expects of Our Students." Along with the knowledge of fundamentals Mr. Vinet emphasized the needs of developing personality. Fear, doubt, hesitancy, and a brood of other negative qualities have to be overcome before business can expect any returns from the high school graduate. In overcoming these qualities Mr. Vinet pointed out the value of courses in oral English and public speaking.

On Wednesday, Dr. Ira W. Kibby, chief, Bureau of Business Education, conducted a conference for the group. Problems being studied by the state committees were discussed. The teachers were interested to hear of the research being conducted by the commercial teachers of the state in cooperation with the Bureau of Business Education.

Los Angeles City Commercial Teachers' Association

At the annual meeting of the Los Angeles City Commercial Teachers' Association held on Tuesday, December 16, John N. Given, head of the commercial department of George Washington High School, was elected president, and Edward D. Hilt of John Adams Junior High School was elected treasurer. Under the constitution the retiring president becomes vice-president and the new president appoints his own secretary. Harold E. Ives, therefore, became vice-president. Mr. Given has appointed Miss Eileen Blomquist, George Washington High School, as secretary.

Southern California Commercial Teachers' Association

At the annual meeting of this association held two days later, M. L. Pearson of Pasadena Junior College was elected president. J. R. Baker, head of the commercial department of Glendale High School, was selected vice-president and M. H. Tuttle of Huntington Park was elected treasurer. According to the constitution, Mr. Pearson will appoint his own secretary.

Central Section Commercial Teachers' Association

The Central Commercial Teachers' Association held its quarterly meeting at Selma, January 17, 1931. The morning session was given over to the transaction of business. This was followed by a luncheon at the Hotel Selma at which local business men met with the teachers. A report of the activities of the state typewriting committee was made by Miss Anna Peterson, Selma Union High School, the Central Section's representative on the state typewriting committee. Karl W. Mitchell is president of the Central Section; Mrs. Maude W. Henders is secretary.

LIST OF AVAILABLE PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE
STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 17. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High School Students. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

Calif. Univ. Vocational, May 2

CALIFORNIA VOCATIONAL NEWS NOTES



ISSUED NOVEMBER, FEBRUARY, AND MAY

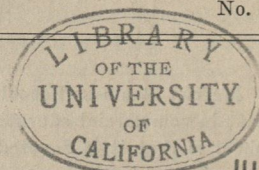
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BERKELEY, CALIFORNIA, MAY, 1931

No. 3

Adult Education in a Machine Age

By GRACE R. SOUTHWICK
Director Adult Education, Santa Barbara



A machine in Milwaukee takes in raw steel sheets at one end and turns out at the other end automobile frames, painted, dried, ready to ship, at the rate of one every eight seconds, day and night. Ten thousand frames a day! Once it took 2,000 men to make 10,000 frames a day; now, this machine requires 200 servitors only. That means 90 men in every 100 must seek new jobs!

To build St. Louis's new concrete sewer, there are needed 33 machine operators plus 37 laborers. Seventy men replace 7,000 pick-and-shovel men! Time-studies have reduced the assembling of carburetors from 450 minutes to 45. Even chocolate dippers have increased their output 88 per cent per girl employed. During 1928, mergers involved 1,259 firms, releasing many high-grade managers and executives.

To face such facts of unemployment, due to "displacing of men by machines, by motion-studies, by mergers," a conference was called last December by the American Association for Adult Education. It included economists, presidents and personnel men of large corporations, and educators. Among other findings, closer contact was urged between the vocational-training courses in schools and the industrial world which is always planning some leap ahead that sometimes makes obsolete the job before students complete their training. For re-educating the mature displaced worker, society should bear the burden and evening schools should be alert to retrain men in new skills and techniques. "Man is not the kind of machine that can do one thing only." Adult education must study to guide displaced workers toward occupations most closely allied to their previous training, such as the transfer of locomotive firemen to oil-fed engines.

Newton D. Baker said, "A man who has devoted the best earning years of his life to an application of a skill

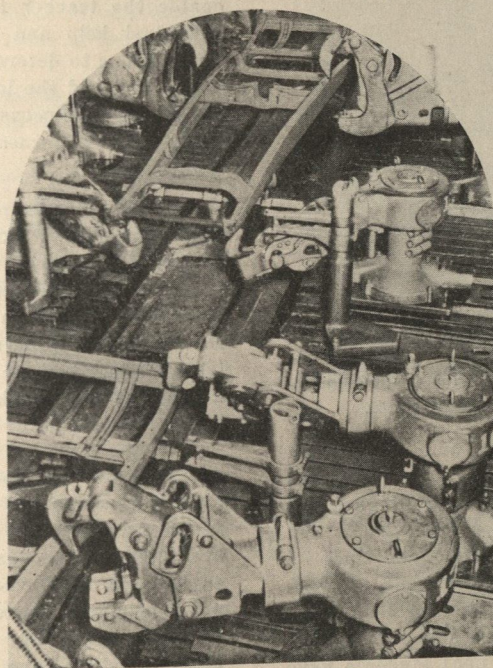
or cultivation of an aptitude, and then finds that an opportunity for the exercise of that skill or of that aptitude is taken away, has really suffered an amputation." Mr. Baker and many other leaders proposed that adult education should not only "re-endow the dispossessed

with capacities for industrial occupation," but should also accept the challenge "to prepare and educate society for those *collective steps* that are necessary if the pain and waste of the present clumsy industrial adjustments are to be lessened."

Must we not expand the functions of government to include adequate public employment agencies? Should there not be accurate forecasting and guidance for workers toward industries that are expanding? Should there not be some form of unemployment insurance? Adult education must blaze the trail.

The March convention of the State Building Trades' Council went on record for the six-hour day and the five-day week. If by 1940 we consume each day 14 hours in work and sleep and have two days' leisure each week-end, what a task confronts adult education to fit us for use of this leisure to make us, in Henry Suzzalo's words, "... more moral, not less so; more refined, not more gross; more eager workers, not less willing workmen."

The National Education Association has taken the initiative in creating a commission (with auxiliary commissions in every state) for the enrichment of adult life. The Department of Adult Education is enlisting the cooperation of many societies, for example, National Congress of Parents and Teachers, United States Chamber of Commerce, American Medical Association, and the American Library Association. With the loss of hobbies in handicrafts, and of the personal satisfactions secured during the day's work in creative craftsmanship as machines displace handwork, our national nerves become more and



ROBOTS MAKE AUTOMOBILE FRAMES

Courtesy A. O. Smith Corporation, Milwaukee, Wisconsin.

more taut, and our need of the emotional arts of music and drama to keep us a sane and healthy people grows more acute. If democracy really means a fighting chance for every man, our public schools must give instant heed through adult education to the enrichment of workers' lives through books, through folk-choruses, through pageants of

pioneer days, through every avenue to beauty. We must open a window to the blue by courses in psychology that help people to understand themselves, and by discussions that offer a constructive philosophy of life, and a scientific approach to our muddle of economic and social problems created by the automatic, iron man.

Merritt Business School Trains Adults

By HELEN ABELL

Faculty Adviser, Secretarial Department

Merritt Business School was established as an experiment in commercial education. The unique feature of the school is that it is devoted entirely to training for business. The objectives are purely vocational, the procedure is organized to meet two very definite needs. The first of these is the preparation of students for advantageous employment in whatever field of work they choose; and the second is what might be termed a "business extension" objective, to provide training to employed commercial



Office training in Merritt Business School.

people who desire further knowledge and skill as an additional asset in their present jobs. That there has been a long felt need on the part of adults and high-school graduates for this type of continuation education is evidenced by the tremendous growth of the school since its establishment in September, 1929. At that time, 65 high-school graduates were enrolled. In September 1930, there were 900 attending, of which 610 were high-school graduates. During the present semester 1,551 students have enrolled, of which 760 are high-school graduates.

Organization

A departure from high-school procedure is made in the organization of classroom instruction. A student upon entering the school is assigned to a "major" training teacher with whom he is programmed for the larger portion of his course, remaining with the same instructor as a rule from four to five hours. In some cases assignments for minor subjects are made at the discretion of the major teacher. This group system enables the teacher to become thoroughly acquainted with each student, to know his background, his personality, achievements, ambitions, and particular aptitudes. Much individual instruction is made possible as a result of the thorough understanding

which develops between teacher and pupil. When a deficiency is noted on the part of an individual student in some particular subject matter, necessary to the field in which he is training, especial emphasis may be placed upon that phase of the work, while at the same time another student may be emphasizing an altogether different portion of the training. This procedure is made possible through the use of unit lesson plans and pre-tests used in many of the courses throughout the school. Unit lesson plans encourage progress and give each student an opportunity to work to capacity, and at the same time enable the teacher to give more time and attention to individual help and inspiration. Pre-tests are given in some groups to determine previous accomplishment by the pupils to avoid the loss of interest and the waste of time which might be occasioned by needless repetition of something already learned.

Instruction

Individual instruction is carried on largely in connection with what is termed "related subject matter," such as business English, spelling, mathematics, and business ethics. Particular success with the unit lesson plans has also been attained in the machine calculation groups. In shorthand and typewriting best results seem to be secured when classes can be as nearly homogeneous as possible because of drill work necessary.

Students

The type of student enrolled is a point of interest to many. Attendance is compulsory only for the few under 18 years of age who are attending. The majority of students are attending because they want the training and only as long as they wish to attend, both from the standpoint of hours per day and days per semester. About 65 per cent of the students are high-school graduates, many of whom have taken no commercial training whatever in their undergraduate work. A small percentage have had some college work, and many are adults who have had experience of some kind in the business world. They have registered because they have felt the need of additional training to earn a livelihood, and almost without exception they are anxious to learn as much as possible in as short a time as possible. They are anxious to make good use of their time, and the usual situation of the student accounting to the teacher for his time is reversed, making it necessary for the teacher to account to the student for the best use of his time. The classroom atmosphere becomes quite informal and takes on the aspect of a business office with the relationship between teacher and student being more like that between employer and employee.

Teachers

All teachers in Merritt Business School have had actual business experience. This is advantageous both from the standpoint of knowing the kind of skill and information the student will need in his particular line of work and from the standpoint of maintaining the respect of the student. Dr. Kibby's suggestion of leading the student to "think about his job, instead of to know his job," is more easily accomplished when interest can be created by discussion of actual business situations.

In order to keep thoroughly up to date and informed regarding changing conditions surveys are being made by the teachers who call upon employment managers and obtain information concerning the specific duties assigned to workers in various office positions. Job analyses are being made through these findings and the training enlarged or modified according to these reports. This work is of value in determining the kinds of equipment necessary for thorough instruction and the emphasis which should be placed upon them.

Curriculum

The results of the job analyses form the basis for the construction of a curriculum and every effort is made to determine the contents by the demands of the business world rather than by preconceived ideas of what a commercial curriculum should be.

There are four distinct departments in the school: (1) Clerical; (2) Secretarial; (3) Accounting; and (4) Merchandising.

1. The clerical group is divided into the non-recording and the recording divisions, the distinction being in whether or not typewriting is taken. The clerical students form a "first job" division, preparing in a general and sometimes in a specific way for the duties of such positions as beginning typist, general office clerk, machine operator, file clerk, and other junior positions. Many of these students are under 18 years of age and are employed part-time. No attempt is made to train secretaries, accountants, or executives, the stress being placed upon the "first job." Preference is given in placement to those actually trained in this field, rather than to students from the secretarial group, on the theory that too many students are training to be secretaries and too few for the position they really obtain.

2. The secretarial department is the largest in the school. Entrance to this field is limited to high-school graduates on the theory that general education and background are as essential to success as the skill in shorthand and typing the student might acquire. As outlined previously, the major training is given by one instructor with the expectation that the correlation between related subjects may be emphasized rather than the divergence, as is often the result of an attempt to isolate subject matter into separate "slices." Considerable time and attention is of course devoted to the development of skill in shorthand and typewriting in the secretarial division. Much emphasis is placed upon English usage, spelling, punctuation, and business ethics. Students complete the shorthand theory in one semester, and many of those who began their training in the fall are now writing between 90 and 100 words a minute on new material of between 1.4 and 1.5 syllable intensity. Particular emphasis is also placed upon transcription speed and accuracy, the

standard for acceptable transcripts being, a "commercial transcript." Certificates of proficiency are being prepared by the department to be given to students who have successfully passed a series of tests given by the instructors. The certificates indicate that a student is considered either a class "A" or class "B" stenographer, depending upon the rate of speed at which she is able to take dictation and transcribe. The exact rate of speed has not been completely settled upon as yet, but will be high enough so that a certificate will indicate superior merit.

3. In the accounting department training is divided into two main heads: (1) machine calculation; and (2) bookkeeping.

The machine calculation courses are again divided into two sub-heads: machine calculation major, or specializing course, which prepares students for advantageous entrance to the employment field as calculating machine operators; and machine calculation minor, or shorter course, which provides students who wish an incidental knowledge of machine operation, with the minimum skills and knowledge required to aid them in securing employment in other fields of work. The training course is divided into six blocks, stressing in turn, addition, multiplication, subtraction, division, specific applications, and work in specific fields. In all six blocks training in actual job situations is offered. Unit lesson sheets are provided in billing, stock-taking and inventory, payroll, dry goods, bank ledger work, pro-rating, mark-up, etc. Merritt offers also a business extension course in machine calculation of specific value to employed commercial workers.

In the bookkeeping major, the emphasis is of course upon bookkeeping, which is prescribed throughout the course of study in the department for those so specializing. Cost accounting and banking are also advised for particularly capable students, and when possible, elementary accounting is developed. Fundamentals of business arithmetic are given in close correlation with the bookkeeping course for such students as need the supplementary training. Filing, typing, commercial law, and business organization and administration are other subjects included in the course. A "certificate of proficiency" is being prepared by this department also for students who attain various employment levels.

4. In the merchandising classes, or retail-store training groups, the psychology of selling is given special attention with class demonstrations of selling talks for various commodities. Considerable time is given to the study of textiles, non-textile merchandise, and fashions. Such personal characteristics as good health, cooperation, alertness, attractive appearance and manner, ambition, sense of responsibility, ability to express oneself well, and courteous attention to the customer are dwelt upon at length. Analysis is made of store organization, qualifications for beginning jobs throughout the store, and steps of promotion. The course is one semester in length, but many students are placed during the course, on cooperative, temporary, or full-time basis. The conditions are: an opening in a store, a student with qualifications to fit the job.

Placement and Coordination

The success of such an institution as the Merritt Business School depends largely upon the possibility of
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Red Cross Cooperates with Continuation Schools

By RENA HAIG

Assistant National Director Nursing Service, Pacific Branch Office, American Red Cross

As a part of its health education program the American Red Cross sponsors the course in home hygiene and care of the sick. This program had its beginning in 1908 when a demand for practical instruction in health matters for homemakers came to the Red Cross. The development of the work along its present lines dates from 1913 when the textbook by Miss Jane A. Delano, first director of the American Red Cross Nursing Service, was published. From the beginning, the work has experienced a steady growth until during the last fiscal year approximately 66,000 students received instruction in health through this channel.

The course which is based on the Red Cross Home Hygiene and Care of the Sick textbook includes instruction in personal and household hygiene, care of the normal baby, pre-school and school child, simple procedures in the care of the sick in the home, common emergencies, preventive measures, and community health. Throughout the course emphasis is placed on the promotion of healthful living.

The aims of the home hygiene course may be stated as follows:

1. To develop in the student an appreciation for health and a desire to build those habits which will safeguard it.
2. To teach fundamental relationship between individual health and the cleanliness, sanitation, and arrangement of homes.
3. To teach efficient and healthful methods of meeting the normal problems of the home as a basis also for intelligent practice in those special problems of the care of the baby, the growing child (pre-school and school) and the aged in the home.
4. To build a basic understanding of the principles of prevention and control of disease.
5. To develop some manual skill in the care of the sick under home conditions and according to the physician's direction in order that simple illnesses and home emergencies may be met with safety and efficiency.
6. To develop an intelligent understanding and an attitude of interest and cooperation in solving community health problems.
7. To give a comprehending appreciation of the profession of nursing as a basis for vocational guidance of those class students who may subsequently plan to enter schools of nursing.

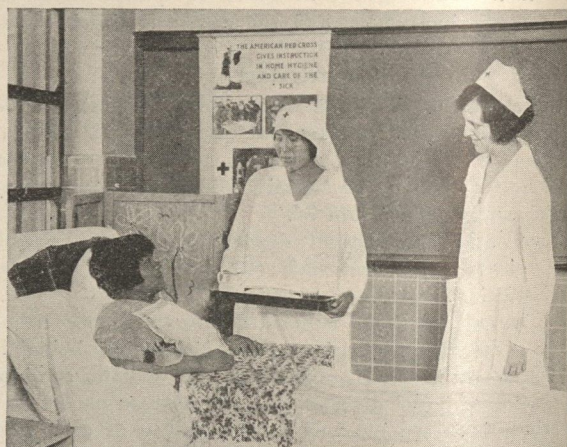
In developing the home hygiene course the American Red Cross has worked out as a result of experience certain standards as to time requirement, attendance and work of students, methods of presenting the work, and qualifications of instructors. When the course is given according to these standards students who complete the work satisfactorily are awarded certificates by the Red Cross.

One of the advantages of the course is its adaptability to groups of various types. To meet the needs of different groups and levels of educational attainment three courses have been developed. These courses are:

1. The Standard course designed for adults educationally qualified to receive such instruction; for college students, and for high-school students in the junior and senior years.

2. The Junior course designed for students in the junior high school, and for classes of this age such as Camp Fire Girls and Girl Scouts outside of school.
3. The Modified course designed for adults of limited education, or for those with a limited knowledge of English.

The minimum time required for the course in schools is 30 hours. However, it is suggested that whenever possible additional time be given in order that students may have the advantage of more thorough study of the subject. In many schools the time has been increased to from 60 to 90 hours.



Mexican girls learn to care for the sick in the home.

The school credit given for the course varies from one-fourth to three credits, depending upon the number of hours given to the work and to the credit system used in the school. This is a matter which must be decided by each school.

Students who take this course may qualify for Red Cross certificates if the instructor is an enrolled Red Cross nurse who has been authorized as an instructor by the Red Cross. In order to assist nurses who are teaching the home hygiene course the Red Cross cooperates with educational institutions in three sections of the country in offering special summer teacher-training courses. One of these courses is given at the University of California at Los Angeles. It is open to nurses who are teaching or are planning to teach the home hygiene course.

Home hygiene instruction includes theory, demonstration of various procedures by the instructor, and the practice of these procedures by the students. The principle of learning to do by doing is applied throughout the course. Subject-matter presented is practical and deals with every-day situations. Emphasis is placed on actual application by the students of the principles and procedures discussed and presented in the classroom.

One instructor, in order to make the work as concrete as possible, has each student, at the beginning of the course, adopt a family, real or imaginary. This family must

include a mother, father, pre-school child, school child, grandparent, and a married daughter with a small baby. If in the beginning the family is an imaginary one it becomes very real by the time the student has applied to the various members of the family group the problems which are considered during the course.

There are various ways in which the classwork may be arranged for. Many schools have on the staff a full-time or part-time nurse who has the necessary educational qualifications for teaching. Schools which do not have nurses on their staff are frequently able to find a qualified nurse in the community who may be employed to teach this course. At the present time the course is offered in approximately 100 schools in California. During the present fiscal year the Red Cross course is being given for certification by qualified nurse instructors in the continuation schools in San Diego, Long Beach, Sacramento, and Santa Rosa. This instruction in matters of health which relate to the daily life of every individual is of unquestioned value to students in continuation schools since a large majority of this group has little opportunity for further formal education and many of the students go from school to assume home responsibilities. For all homemakers the knowledge of how to meet health problems in the home has economic as well as social value.

Reports received from instructors in schools throughout the state indicate that the students enrolled in home hygiene are keenly interested in the work. The instructor in one continuation school, where the Red Cross course is being given for the first time this year, says: "Hygiene and home nursing has been taught for some years in the continuation high school, but neither credit nor certificates were given to the students. Lack of interest in the group has resulted in almost yearly changes in instructors. The fact that the students are to receive certificates as a reward for their efforts seems to have stimulated interest not shown before. It is indeed encouraging to find through tests, class, and practical work that so much interest is being taken in the work. The girls tell me many interesting stories of improving not only their own health habits, but changing the general ideas of health in their homes. The principal of the school is both pleased and surprised at the enthusiasm which the students have shown."

From another continuation school comes the following story of what the practical application of the principles of personal hygiene has meant to one student enrolled in the home hygiene course. "This student came to us from junior high school," says the school, "because she was not physically able to carry a full program. She had a history of a cardiac condition and had had an operation for appendicitis just a year ago. She fainted frequently. On examination we found a marked defect in vision. Through the clinic we arranged for a thorough physical examination for her. On the advice of the oculist glasses were secured and we found that the fainting was due to defective vision, and not to a heart condition. The doctor recommended that she begin gradually to do routine work about the house. If we can correct her posture we will feel that we have helped this child."

Many interesting reports of the results of the classwork could be related if space permitted. However, the above instances will serve to point out concrete results which have been secured in schools where the course is given. Inci-

dentally both instructors of the classes referred to above have taken the special summer teacher-training course.

Officials of local Red Cross Chapters and the Nursing Service of the Pacific Branch Office of the American Red Cross will be glad to supply additional information and answer inquiries in regard to the development of the home hygiene program.

Principals Discuss Problems of Continuation Education

The recent program of the Secondary School Principals' Convention at Santa Cruz presented two conferences on continuation education. On Monday, March 30, the topic was "Instruction in Continuation High Schools." Mr. T. S. MacQuiddy of Watsonville was the conference leader. Mr. A. E. Paine of Huntington Park presented a state-wide study of the "Method and Content of Instruction in Continuation Education." The discussion was led by Mr. J. E. Carpenter of Sacramento. Mr. Paine's paper has been mimeographed and a few copies are still available for distribution.

The second conference, held on Tuesday, was under the leadership of Mr. H. A. Campion of Los Angeles. Dr. Emily G. Palmer of the University of California presented a list of "Proposed Standards for Evaluating the Work of the Continuation School." Discussion was led by Mr. F. L. Tibbitts of Marysville.

This is the first time that the principals of continuation schools have had their own conference group in the association. As a result of these two meetings a committee was appointed to continue the study of the problems of instruction in the continuation school. Mr. J. E. Carpenter of Sacramento is chairman of the committee, Mr. R. F. Aspinall of Fresno, and Mr. A. E. Paine, of Huntington Park, are the other two members. It is hoped that the results of the year's study will furnish material for a state bulletin on instructional material for continuation schools.

MERRITT BUSINESS SCHOOL

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placement of the students who have taken the training. Placements in the clerical and stenographic fields have been of the following character: stenographers, typists, general office workers, delivery boys, and bookkeepers. The placement work in the merchandising courses has been exceptionally successful and at times the difficulty is rather on the side of keeping the capable students long enough to complete training rather than of placing them after completion of the course.

Six teachers devote part of each day to coordination work making contacts with business offices and securing as much information as possible about the jobs which students may fill. This coordination work also provides an exceptional opportunity for "follow-up" work, and in the event that a mistake has occurred in placement or training a readjustment may be made. Merritt is rapidly passing the experimental stage and it is generally felt that it marks a very definite step forward in the advance of adult education in Oakland.

Continuation Education Serves Adults and Juniors

By H. N. McCLELLAN, Principal,
Berkeley Continuation High School

Continuation education in California has this year passed the ten year mile stone and entered upon what Mr. Carpenter has declared to be the most dangerous ten years of its operation. "From now on," declared Mr. Carpenter, "we are in danger of having a program, a system, an organization, and bending our efforts to the continuation of that system and the organization we have built up, without sufficiently close check-up upon ourselves to determine whether the needs to be met are the same as they were, or in any event, whether our organization is continuously being readapted to meet present needs.

"With the changing character taken on by the full-time schools, a change about which we should feel highly elated, let us be sure that we do not merely continue our present program as already developed, but that we continually revise it to meet the real needs of the boys and girls of today, not those of the day when we first set up continuation classes."

In order to avoid the dangers which Mr. Carpenter has indicated, we need to check up on our progress from time to time to determine whether we are still on the course. This can perhaps be best done by occasional restatement of the functions or objectives of continuation education, and a careful evaluation to see that our practice does not lag too far behind our ideals.

Objectives are Broad

Statements of the objectives of the continuation school range from the conception of the school as purely for the purpose of providing a continuation of the courses taught in the full-time school to that of a vocational school; and from the idea that the continuation school is a necessary part of any large educational system, to the statement that, "The part-time continuation school is a merely temporary institution which is to be tolerated until enlightened public opinion makes it unnecessary and impossible for any normal boy or girl to leave school until the end of the high school period." Other statements of objectives of continuation education include the extreme continuation school view to the effect that the school is intended simply to continue education previously begun by the pupils; the social-civic aim; the aim of education for complete and effective citizenship; the objective of guidance; and the vocational training objective.

It is difficult to understand how anyone familiar with the problem of modern secondary education could make so extreme a statement as that continuation education is a temporary institution to be tolerated until the age of leaving school is raised. Society is more and more asserting its guardianship over all youth up to the age of 18, and our modern conception of education is "all the children of all the people." Today our elementary and secondary schools are crowded with youths of all degrees of interests and abilities. Our high schools have so far made very little progress toward differentiating their curricula and methods so as to meet the needs of students of varying abilities, and it will probably be true for some time yet that the pupil of 90 I.Q. or below has little chance of completing the standard high-school course. Moreover, although only

one-fifth of the pupils who enter high school finally graduate and enter higher institutions, the organization and administration of the regular high school still over-emphasizes the college preparatory objective.

The fact is that a considerable percentage of our youths of secondary school age are not "normal," when measured by tests of abstract intelligence, and the high school, as at present organized and administered, makes no proper provision for them. We shall probably always have, in any school system, a certain percentage of pupils who cannot, or will not, profit from the regular high-school course. In addition to these we shall always have those who, for economic reasons, drop out of the full-time school and enter the industrial world. For such minors as these a special school of the continuation type will always be necessary, at least until the high school makes adjustments not now anticipated.

Three Groups of Pupils

The narrow conception of the continuation school is held by comparatively few of those really conversant with the problem. Compulsory continuation pupils may be divided roughly into three groups: (1) those who *cannot* do the work of the regular school; (2), those who, for various reasons, *will not* do the work of the regular school; and (3), those who have left school to go to work. (The third group will, of course, include many of those in the first and second groups, also.) To give the first group more of the same work in which they have already failed is absurd, and only to invite further discouragement and disaster. The second group has already rebelled at the work of the regular school; and continuation education of the academic type is manifestly not in order for those who have already entered business or industry.

The social-civic objective is too indefinite to be of value in determining specific aims and methods for the part-time school. It includes practically all of the more definite objectives and is, of course, the ultimate goal toward which all education moves. Advocates of the socializing or stabilizing objectives are inclined to over-emphasize the idea of education for the problem child, without indicating definitely how this socialization is to be accomplished, and without recognizing that there are also other groups to be served in addition to the problem group. Moreover, a careful study of individual cases combined with proper guidance, training, and placement tends to solve the problem cases.

Objectives Must Be Specific

There can be no doubt that education for complete and effective citizenship is the ultimate aim for all education, and this is particularly true of continuation education. The continuation school is, for many pupils, society's last opportunity to instill into its coming citizens ideals and attitudes of civic virtue. However, to say merely that the objective of the continuation school is effective citizenship is not sufficient. We need to know specifically in what ways the school can and should contribute to good citizenship; we need to analyze good citizenship into its component parts,

to set ourselves proximate aims, and to strive for the attainment of those subordinate objectives which together produce good citizenship.

That preparation for and guidance into a vocation is essential to good citizenship cannot be questioned. The importance of vocational guidance and vocational training for the pupil who is forced to leave school to go to work is self-evident; and guidance and training for productive work, together with placement and supervision of the minor workers, becomes, for pupils who cannot or will not profit from the work of the regular school an educative process and a "way of salvation" for which there is no substitute.

Any discussion of the aims or functions of the school must take into consideration the needs and interests of the pupils who attend. These pupils can be classed roughly as the adjustment group, which includes all pupils under the age of 18 years, and the so-called adult group including all pupils over 18 years of age.

In the adjustment group we have pupils who attend four hours a week if employed, and three hours daily, under the new law, if unemployed. The intention of the new law is evidently to require a pupil to be either in school or at work, the theory being that a child's best interests demand that he be given an opportunity for an education. In this group we find some pupils who have been forced, on account of actual need for work, to leave school, and in some instances, after working for a time they will return to the regular high school; some pupils who are not interested in the type of work offered by the regular high school who will probably secure the major part of their education in work situations but under the guidance of the continuation school; and a small percentage of pupils who because of hereditary or environmental influences are classed as "problem" cases. Pupils in this group, which constitutes a relatively small percentage from which the greater part of our difficulties come, frequently are not disposed either to attend school or to work.

For the adjustment group the continuation school is under obligation to provide systematic guidance and another chance for those who for some reason have not made the most of their opportunities and to provide an opportunity for self-finding and self-adjustment.

Adults are also Served

In the adult group, for which the continuation school should provide some opportunity, we find students ranging in age from 18 to 65 years. This group in the Berkeley Continuation School during the school year 1929-30 was composed of 13 per cent college graduates, and 37 per cent high-school graduates. These students come to the continuation school for a variety of reasons. Some students who have not made the most of their opportunities in the high school come asking for the opportunity to finish their high-school training; some need practical training for definite employment; and some pupils in Berkeley are university students who need certain specific high-school courses for pre-requisite requirements at the university.

The Berkeley Continuation School has also recently organized a number of specific short courses intended to meet needs of special groups. There is at the present time a group of policemen who come to the school for instruction in typewriting, English, and public speaking. There is also a smaller group of policemen who are being served at the

present time in a course for radio technicians. Last fall the school offered an intensive course in retail selling for a group of students specially interested in that field, and during the months of April and May, 1931, the school offered an intensive eight-weeks' course for the training of secretarial and clerical workers.

Program must be Based on Needs

From a study of the students, therefore, we find, as previously stated, that so far as its contribution to occupational efficiency is concerned the continuation school must provide guidance, training, placement, and follow-up work. In the field of guidance there should be occupations classes in which the student may secure occupational information about the entire range of industrial and commercial occupations, and an intensive study of at least one occupation in order to determine his own fitness for it. The guidance program must also include individual counseling for each student and a study on the part of the counselor of his personal characteristics and his past school record. The third important point in the guidance program is the provision of try-out experiences. These experiences should take the form in the school of various kinds of industrial and commercial work to aid the student in the selection of the occupational field which he will probably pursue, and outside the school an exposure to as many concrete work experiences as possible.

Placement and follow-up work should be emphasized throughout the continuation-school period, as many of the pupils will receive the major part of their education in work situations, and will learn habits of honesty, punctuality, industry, courtesy, etc., most effectively on the job.

Placement must be systematic and well-organized, and follow-up work must be thorough. The ideal in placement should be not merely the placing of the best pupils in positions which come to the attention of the employment office. We must recognize that it is our responsibility to market as large a per cent of our "product" as possible, to the end that our pupils, of all grades of ability, may find their places in self-respecting, productive work on whatever level their abilities determine. Only thus can we fulfill our obligation to the pupil and to society.

The broad humanitarian ideal for the work of the continuation school is a laudable one; for example, we have had recently in the Berkeley Continuation School a sixteen-year-old girl who because of a broken home has had to shift for herself. She is desirous of securing an education but so far has been deprived of that opportunity. The continuation school has helped her to secure employment, is acting as her guardian, and is giving her an opportunity for an education. This illustration could be multiplied many times in every continuation school in California. It is not sufficient, however, for us merely to help these young people secure temporary work and help them to meet their immediate problems. We must give them something of lasting value, namely, the opportunity to help themselves. We must, in other words, make them vocationally and socially effective in the best meaning of those terms.

The continuation school is in a peculiar sense an opportunity school. To adults who come to the school inquiring about our courses we say, "Our school is in session eight hours a day. You may come for one hour or for eight, and we will do our utmost to give you something of real benefit."

To compulsory pupils we say, "The law requires you to come and it is our duty to see that you do come, but we are much more interested in seeing that when you come you get something of value. That is the part of the contract which

interests us most, and we will do our utmost to fulfill it." We must be salesmen of education both to the young people who come under compulsion, and to the older ones who come because they hope to get something of value.

Project Instruction in Training Home-Economics Teachers

By MAUDE I. MURCHIE

Chief, State Bureau of Homemaking Education

The organization of a child laboratory project and a parent laboratory project in the home-economics department of San Jose State Teachers College was initiated and promoted in 1924 by the State Bureau of Homemaking Education. The purpose of these projects was to provide persons in training as teachers of homemaking subjects with a better understanding of child life, that they might be better equipped to handle subject matter dealing with child development in homemaking courses for girls and for women.

In connection with these projects a home-management project was developed with student residence in the home-making apartment of the institution, under the direction of the vocational teacher-trainer. These projects have resulted in increased emphasis in child development and home management problems both in the technical and special education courses of the department.

Many Departments Cooperate

The activities of these projects have been definitely articulated with those of the departments of health, physical education, education, psychology, English and kindergarten, respectively. Major building and equipment improvements have been provided during the biennium. The sum of \$2200 from the vocational education fund is applied to the support of this program.

The work in child care and training in this institution is entirely on the project basis, carried on through the child laboratory group of pre-school age children and by a group of the mothers of these children, who meet regularly at the institution, with a well-organized program providing contacts for young women in training as homemaking teachers.

Mrs. Margaret Coyle has been carrying the many responsibilities in this program and has done very excellent work in bringing about splendid cooperation with other departments. She has handled the group of children and the mothers' group, has supervised the homemaking teachers in training in the project activities which they have carried, has given a part-time education course involving this type of work, and has carried on the home-management project requiring residence in the institution apartment. The home management unit is also connected with the child-care and training unit and with work of the group of mothers, so that family relationships, home management, and child care and training are being taught through the actual projects carried as examples of project teaching.

In the laboratory group of children an average of 20 was enrolled for the summer, winter, and spring quarters. During the year there were 14 boys and 15 girls enrolled. Four of these children had attended at some other time upon this project. They ranged in age from 16 months to four years and 10 months. The average age was three years. The average number of clock hours which each child spent in the project, was two and three-quarters per day.

For the purpose of training in child development, persons in training as homemaking teachers had regular contact with these projects. Six students from the home-making group spent six hours weekly in the activities of the group during the fall quarter; nine served in the winter quarter, and nine in the spring for the same amount of time. From the kindergarten-primary department of the institution students who were majoring in kindergarten training participated in this project and carried all activities in the children's group, with the exception of the responsibility for the nutrition needs; three participated in the winter quarter, and one in the spring quarter, securing training in practice teaching in providing plays and games for the group, and in observation of the group activities related to their department.

From the physical education department the students observed and assisted with the group one-half hour daily from 11 to 11:30 and participated in the instruction of this group in the problems of posture and rhythm; also, they participated in orthopedic projects. They provided the pianist, and participated actively in the plays and games of the children as an educational project.

The psychology department cooperated with these projects; eight students from the psychology department participated in the fall quarter; six in the winter quarter, and nine in the spring quarter, giving tests to all children in the child laboratory group.

Curriculum classes in education participated as a whole. An entire class in the winter quarter and one in the spring quarter observed all the activities of the group. These observations were used in the general curriculum classes of the institution. The health department examined all children of the laboratory group. The doctors, school nurse, and instructors of that department carried on the work, the students observing and assisting in the project.

All the students preparing as homemaking teachers are scheduled for definite work in the child laboratory group before completing their training. They enter upon this training in their upper division courses, and as late as possible, that they may have a suitable background for the work. Such courses as psychology, foods, clothing, nutrition, health, hygiene, first aid, usually are prerequisite courses.

Five quarter units is the credit given to the work with the child laboratory group. This includes two units of lecture and discussion work to prepare for participation in the project and is given parallel with the laboratory work, but at another period.

Mothers Are Enrolled

Twenty parents attended during the three quarters as the parent laboratory group. During the entire year 29 different mothers were enrolled in this group; each of them had children enrolled in the laboratory project. All of them had small children; other persons are not enrolled.

In the beginning of the experiment, students in training in the institution as home-economics teachers met with the parent group, but this practice has been discontinued for a time, as it seemed that the mixed group did not promote free discussion by the parents of the problems presented. However, these students have contact with this project and the problems of the group are presented to them. Students who have children, however, may enroll, and do enroll in this parent group. Parents attending the laboratory work are given no college credit; but the group of persons in training as homemaking teachers, enrolled in the work dealing with parent education, receives three quarter units credit. These parents in training do observation work in the child laboratory group during their training.

It is the opinion of the workers with these projects that the parents resented the intrusion of students when discussing their problems, since many of the students had had no maternal experience. This project is new and we are feeling our way. It may not be advisable to keep two groups segregated, although much tact is demanded in handling a mixed group. Since in life we are not kept in segregated groups, there is a very definite contribution that should be made to the group in developing a consciousness for the need of tolerance and mutual understanding of problems common to parents and teachers.

The group work with the parents is supplemented by a very large number of personal conferences. A reception room, equipped for that purpose, has been arranged by the institution and is housed in the home-economics department. These conferences are arranged from ten to one during laboratory periods, other than the parent laboratory period, so that conditions are made to promote utmost confidence and privacy for any problems which parents may desire to present in this way. Such problems as have been presented for personal conference by various women are, posture, corrective shoes, distended stomach, tight clothing, supplementary feeding, circumcision, tonsillectomy, vaccination, symptoms of infectious diseases, parent indulgences, family friction, financial strain, choice of homes for child development, and so on. The instructors feel that many of these problems could not be handled entirely through class discussion.

That the project is making a definite contribution to the homes is shown by much evidence. Many children show a very obvious improvement in social adjustment; there is an increased enthusiasm on the part of the parents, and an expression of loyalty to the instructor and to the laboratory work. One parent with a child who is now in the second grade, but who attended the laboratory project as a preschool age child, still brings other parents and children to the laboratory and is each time more enthusiastic than ever about the value of the work.

As stated above, the child is given a very complete examination by a physician of the health department of the institution, who is an outstanding child specialist. The parent is present at the examination and a record is kept of the findings. The parents have shown complete cooperation in the examinations and in following up the instructions of the doctor. These findings in a non-personal way are used also for instructional purposes.

Many of the carry-over values into the home life are, more careful observation of health conditions on the part of parents, better selection of shoes for children, more care

in the cleanliness of the child and its clothing, and a definite change in the nutritional habits of the entire family.

Individual Problems Solved

The psychology department furnishes the testing of the children, in the laboratory equipped for this purpose, which is off the reception room in the home-economics department. Among the several problems indicated by the psychology department for solution have been those of fear, repression, carrying of responsibility, shyness, self-assurance, and so forth. As a result of the cooperation of parents with this group, many instances can be given of carry-over from such work into the lives of the children, and for better understanding of them. One child, through the cooperation of the parent with the workers, was able to overcome great shyness and become a real leader in nine months. Another child that was waited on to a considerable extent by the mother, had developed lack of confidence. The mother effected the new regime on the suggestion of the psychology department, which has been followed for one and one-half years, with the result that the child, who is now six years old, is in the second year of school and is carrying outstanding responsibilities.

The students in training as home-economics teachers, in addition to their actual participation in child management and in the child laboratory, have child problems presented to them in lectures and discussions in their education courses, applied in their educational measurements, and emphasized in the technical courses.

Interviews are provided for students with the parents, and with the psychologist, and many check-up conferences are held relative to problems on which they are mutually working.

Child Nutrition Studied

The children's meals are served regularly by the students in training, who plan the menus, which are approved by the nutrition section of the home-economics department. The menu is prepared by the students, who also care for the kitchen duties connected with the same. The duties in the child laboratory group are handled on a rotating schedule for the group of students receiving this training, and are under the supervision of the vocational teacher-trainer.

The group of parents is brought into contact with child feeding situations through class discussion when meal plans are prepared and agreed upon, by outside readings, by observation of the children's habits and attitudes regarding food, and by conferences. The principles of child feeding as carried on in the child laboratory are presented to the group of persons in training as home-economics teachers, enrolled in food and nutrition courses, applied in the cafeteria with the first six grades of the training school, and in the kindergarten of the demonstration school, and then applied in the children's laboratory. These groups studying food and nutrition approve the menus for the children's lunches and make suggestions for them. The menus are given weekly to the parents and to the students.

Child Clothing and Recreation Included

Students enrolled in the clothing classes of the home-economics department for training as teachers of home economics, are also brought into contact with this project, in that each homemaking student has a child clothing

(concluded on page 50)

CALIFORNIA VOCATIONAL NEWS NOTES

ISSUED NOVEMBER, FEBRUARY, AND MAY

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Agricultural Education Trade and Industrial Education
Business Education Vocational Guidance
Continuation Education Homemaking Education
California Vocational Federation

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ADULT EDUCATION

The education or re-education of the adult is one phase of vocational education which seems to bring the largest rewards for the service rendered. This issue of the *California Vocational News Notes* deals with some of the offerings to adults in the various fields of vocational education throughout the state.

SUMMER SESSION IN VOCATIONAL EDUCATION AT BERKELEY AND LOS ANGELES

At the 1931 summer sessions of the University of California at Berkeley and at Los Angeles the Division of Vocational Education will present five types of courses: (1) general courses in vocational education and guidance, designed for all persons interested in those fields of education; (2) courses in commercial education, dealing with special problems in the field; (3) the summer curriculum for training trade and industrial teachers; (4) certain up-grading courses, open to individuals who have completed the requirements for the vocational arts credential; and (5) courses in continuation education.

Candidates for the first-year course leading to the special secondary vocational-arts type credential will find the full curriculum offered in Los Angeles. Holders of the vocational-arts credential who have completed the minimum of teacher training and wish to take the second year of work or secure six units of up-grading work for the long-term credential will find the required courses offered in both centers.

In Berkeley a choice of six out of eight units are offered for holders of the vocational arts credential who have completed the two-year course and wish to secure six units of up-grading work for the long-term credential; principles of conference leading, cooperative vocational education, administration and supervision of vocational education, and continuation education. It is also possible for a teacher in the coming summer session to fulfill the requirements for a long-term credential, complete the requirements for a coordinator's credential, and take six units of work towards a supervision credential. The course, "part-time, cooperative, and trade-extension education," taken in the second year of teacher training must not be confused with the course in cooperative education which emphasizes the problems of the coordinator.

In Los Angeles there are three courses offered for holders of the vocational-arts type credential who have completed the two-year vocational teacher training course and wish to secure six units of up-grading work for the long-term credential: problems in continuation education, analysis and organization of related technical curricula; and in certain cases vocational guidance. All of these courses are accepted toward the coordinator's credential and for Class B departmental and special supervision in trade and industrial education. The completion of the course, analysis and organization of related technical curricula also qualifies the applicant for the credential in trade technical and related technical subjects.

Applicants for the credential in continuation education will find one course in Los Angeles and two courses in Berkeley. Six units toward the credential in continuation education may be obtained in Berkeley by special arrangement.

Commercial teachers will find methods in office practice emphasized in Berkeley and methods in typing and shorthand offered in Los Angeles.

Berkeley

Courses of General Interest

- S160. Vocational education: general course. Dr. Horridge.
2 units. M Tu W Th F, 10.
- S164. Vocational guidance. Professor Lee.
2 units. M Tu W Th F, 11.

S260A. Vocational education: Seminar. Professor Lee.
Admission only on consultation with instructor.
2 units. M W, 4-6.

167S. Administration and supervision of vocational education. Dr. Horridge.
Prerequisite: Education 160 or equivalent.
2 units. M Tu W Th F, 9.

Courses for Commercial Teachers

165C. Business training curricula. Mr. Sorensen.
2 units. M Tu W Th F, 8.

365C. Methods in office practice. Mr. Sorensen.
2 units. M Tu W Th F, 9.

Courses for Trade and Industrial Teachers

SECOND YEAR

365. Problems of trade technical instruction. Dr. Haller.
M Tu W Th F, 10-12.

366. Part-time, cooperative, and trade extension education. (Register in 167C.) Mr. Mallary.

367. Civic and employment relations. Dr. Haller.
M Tu W Th F, 9.

See also courses S162 and 167S.

UPGRADING COURSES

167C. Cooperative vocational education. Mr. Mallary.
2 units. M Tu W Th F, 8.

168. Principles of conference leading. Mr. Mallary.
2 units. M Tu W Th F, 9.

Courses for Teachers in Continuation Schools

S162. Continuation education. Dr. Palmer.
2 Units. M Tu W Th F, 3.

334. Methods in child welfare and attendance supervision. Mrs. Hill.
2 units. M Tu W Th F, 2.

See also courses S160, S164, 167C, and 367.

Further information concerning any of these courses may be obtained by addressing Dr. Edwin A. Lee, director of the Division of Vocational Education, University of California, Berkeley.

Los Angeles

Courses of General Interest

S160. Vocational education: general course. Mr. Mann.
2 units. M Tu W Th F, 11.

S164. Vocational guidance. Mr. Campion.
Consent of instructor is required for registration in this course.
2 units. M Tu W Th F, 12.

Courses for Commercial Teachers

362T. Demonstration and methods of teaching typewriting. Mrs. Allen.
2 units. M Tu W Th F, 8.

368S. Demonstration and methods of teaching Gregg shorthand. Mrs. Allen.
2 units. M Tu W Th F, 10.

Curriculum for Trade and Industrial Teachers

FIRST YEAR

361. Occupational analysis and curriculum construction. Mr. Johnson, Mr. Waidehlich.
Two sections. M Tu W Th F, 8-10.

362. Technique of vocational instruction. Mr. Johnson, Mr. Waidehlich.
Two sections. M Tu W Th F, 10.

364. Theory and administration of vocational education. Mr. Kienholz.
M Tu W Th F, 11.

SECOND YEAR

365. Problems of trade technical instruction. Mr. Stier.
M Tu W Th F, 10-12.

366. Part-time, cooperative, and trade extension education. Mr. Stier.
M Tu W Th F, 8.

367. Civic and employment relations. Mr. Mann.
M Tu W Th F, 9.

UPGRADING COURSES

363. Analysis and organization of related technical curricula. Mrs. Donovan, Mr. Walton, Mr. Wright.
Prerequisite: State credential in trade and industrial education. 6 units.
M Tu W Th F, Sec. 1, 9-12, Wright; Sec. 2, 9-12, Donovan; Sec. 3, 1-4, Walton.

See also courses 169, S164.

Courses in Continuation Education

169. Problems in continuation education. Mr. Campion.
2 units. M Tu W Th F, 11.

See also Education 160, 366, and 367.

Further information concerning any phase of the program may be obtained from Mr. Benjamin W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles.

DR. MYERS HEADS N.V.G.A.

Many Californians who have had the opportunity of taking Dr. George E. Myers' courses in vocational guidance when he has been on the summer session staff of the University of California, and many more who have enjoyed his book "Problems in Vocational Guidance" will be pleased to learn that Dr. Myers, director of the Vocational Education Department of the University of Michigan is the newly elected president of the National Vocational Guidance Association. The association held its annual meeting recently in Detroit.

NEW PUBLICATION ON COORDINATION

An effective program of vocational education includes as its most vital activity the coordination of the work of the school with the environment of the pupil, both in and out of work hours. A country-wide survey of the activities classified under the general terms of coordination in various types of trade and industrial schools is, therefore, timely. At the request of the Standing Committee on Part-time Education of the American Vocational Association, Mr. J. Ray Stine, principal, Akron Continuation School, Akron, Ohio, undertook the study, and now presents facts which are of great importance to coordinators, trade or continuation school principals, and directors of vocational education. This study is published under the title of "Coordination in Part-time Education."

The study covers coordination as it affects adjustments in instruction, counseling and guidance, placement and follow-up, social adjustment, and attendance. The method of coordination, and the function of coordination as understood by field workers, with opinions and classifications of the outstanding duties are fully presented.

This bulletin, *Coordination in Trade and Industrial Education*, may be secured from Dr. Z. M. Smith, secretary American Vocational Association, Room 225, State House, Indianapolis, Indiana. The price of the publication is twenty-five cents.



CALIFORNIA VOCATIONAL FEDERATION



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President Gilbert Says:

The sixth annual conference and convention of the California Vocational Federation will be held in Los Angeles on June 26 and 27, 1931, just preceding the convention of the National Education Association.

Although the program is still in a tentative state, plans are being laid for a two-day and evening convention that will surpass any previous convention we have held, and that is saying a great deal. Due to the influence of the N.E.A. convention, which will follow, an unusual opportunity is offered.

Within the near future, programs and literature pertaining to the convention will be mailed to every vocational teacher, superintendent, and principal in the state, and to superintendents and principals in cities throughout the nation. Watch for further and more detailed announcements but right now put on your calendar—

SIXTH ANNUAL CONVENTION
 OF THE
 CALIFORNIA VOCATIONAL FEDERATION
 IN LOS ANGELES
 JUNE 26, 27, 1931
 N.E.A.
 JUNE 28-JULY 4
 1931.

News of the Federated Groups

Agricultural teachers at Fortuna.—The Agricultural Teachers Association of the Redwood Empire region is willing to challenge any other group of vocational teachers to equal the record for attendance and interest that is being maintained by it. Interest in association work and in the group discussions and study is so keen that members travel long distances to attend every meeting. The Redwood Empire Association includes schools from Napa, Santa Rosa, and vicinity and away northward beyond Fortuna. Teachers from some of the schools make a round trip of more than five hundred miles to attend a meeting.

One of the most recent gatherings of teachers in this association was held at Fortuna the evening of Friday, February 6 and all day Saturday, February 7. Every school in the region was represented. Friday evening was given over to a social time in American Legion Hall, when the teachers talked informally of their work and problems.

Saturday forenoon was given over entirely to business, and then in the afternoon the group went down to Scotia to one of the largest lumber mills in the country where a

guide conducted them about the plant, and explained the details of the lumbering business. In the evening the men and their guests gathered again in Fortuna for a banquet at which Mr. Arthur Gist, president of Arcata State Teachers' College, was the principal speaker. Mr. B. Coppini, a Jersey breeder from Fortuna, also spoke, explaining his work in building up a fine herd of Jerseys.

* * * * *

Central Coast Section.—Hotel Palomar, Santa Cruz, was the meeting place of the Central Coast Section, C.V.F., for its bi-monthly meeting held Saturday, February 7. Santa Cruz, Salinas, Monterey, and San Luis Obispo schools were represented. Mr. C. E. Knott and two other instructors from the Polytechnic School at San Luis Obispo made a round-trip drive of about three hundred miles to be in attendance. Mr. R. E. Gilbert, president of the C.V.F., was present and discussed federation business. The visiting speaker was Mr. John C. Beswick, chief, Bureau of Trade and Industrial Education, who spoke on "Evaluating factors to be considered in setting up an efficient vocational program."

* * * * *

Southern Section.—Leaders of the Southern Section C.V.F. met Saturday, February 7, at Frank Wiggins Trade School, Los Angeles. The principal business considered was the arrangements for the combined meeting of the Administrative Council C.V.F. with the Southern Section, held in Los Angeles, Saturday, April 18. This meeting was held at the University of Southern California. Mr. Morgan Smith was made chairman of the committee in charge of all arrangements.

* * * * *

San Joaquin Valley Industrial Teachers Meet.—Coalinga High School was the meeting place of the Central Section Industrial Education Association in March. After a visit through the shops of the Coalinga school, the teachers assembled for the business session with President Ellestad presiding. Mr. Weldon of Fresno reported on the machinery and metal show recently held in San Francisco; a financial report was read by Mr. Miller; and Mr. Smith of Exeter spoke of an educational trip suggested for industrial men. A committee consisting of Marcellus, Reimer, Platts, and Suiter was appointed to investigate and report on the advisability of planning for the trip which is said to consist of a visit through educational and industrial centers of the Eastern states, ending with a two weeks' intensive course at the University of Ohio, College of Education. The trip and college course will take eight weeks, it was reported, at an estimated cost of less than \$400 a person. The luncheon speaker was Mr. Baldwin of the Coalinga High School who spoke on the fossil remains found in the vicinity of Coalinga. A trip to the Kettleman Hills oil field with plant inspection was made in the afternoon.

San Diego Teachers' Meeting.—The speaker at the recent monthly meeting of the San Diego Industrial Teachers Association was Elliot F. Landon, supervisor of adult and continuation education, San Diego. The meeting was presided over by Mr. Henry Batchelder of Point Loma High School. Besides the professional discussion and regular monthly business meeting the election of officers to serve until the spring of 1932 was held.

Southern Section Conference, C.V.F.

Teachers from all over Southern California assembled in Los Angeles for an all-day conference at the University of Southern California on Saturday, April 18. The meeting was centered about the spring meeting of the Administrative Council of the California Vocational Federation. The California Industrial Education Association, the Home Economics Association of Southern California, and the C.V.F. Southern Section, held joint meetings. The administrative council began its deliberations at eight o'clock and at ten called the conference to a general meeting at which plans for the annual meeting were discussed.

The meetings will be held on the campus of the University of California at Los Angeles. Final programs may be obtained from the chairman of the program committee, Morgan N. Smith, 2069 West Mountain street, Glendale, after June 15.

Group conferences were held from eleven o'clock until noon. The groups and their chairmen were as follows:

1. Vocational group, L. G. Stier, chairman.
2. Senior high school industrial arts, W. S. Kienholz, chairman.
3. Junior high school industrial arts, C. E. Nihart, chairman.
4. Senior high school agriculture, D. V. Leever, chairman.
5. Junior high school agriculture, Mrs. Marie A. Larkey, chairman.
6. Occupational studies and guidance, H. F. Clark, chairman.
7. Trades and industries for women, G. Laurine Broadwell, chairman.

At the Student Union Building luncheon was served, after which Dr. Fredrick Horridge acted as toastmaster. Mr. Harry V. Adams made the principal address.

Section meetings were again held in the afternoon from 2:30 to 4:00. These conference groups were organized on a trade basis. High school and junior high school groups were divided into sections in automechanics, building construction, upholstery, millinery, beauty culture, etc. Home economics groups were divided into sections on textiles, cookery, etc. Agriculture groups were divided into sections on junior high school and senior high school agriculture. The guidance group had two sections: one on occupational studies and one on the Kiwanis vocational-guidance program. The various groups then reassembled for an informal banquet at the Student Union Building in the evening. The toast-master was Mr. Benjamin W. Johnson, who introduced as the speaker, Mr. Leslie B. Henry.

C. V. F. AFFILIATES WITH CALIFORNIA TEACHERS' ASSOCIATION

On April 11 the Council of Education of the California Teachers' Association passed favorably upon a petition presented by the California Vocational Federation which requested affiliation with the California Teachers' Association. The secretary reported that the application of the California Vocational Federation was in strict conformity with the by-laws, there being more than one thousand vocational teachers who are members of the California Teachers' Association. Mr. Willard E. Givens moved that the report be approved, that this organization

be an affiliated organization of the C.T.A. in accordance with the by-laws. The motion was seconded by Mr. R. W. Everett and carried.

The affiliation was sought, as explained by the president, to broaden the field of the federation as a professional organization, and in order that it might assume a share of the responsibility for the accomplishment of the aims and purposes of the California Teachers' Association.

Mr. Gwinn in welcoming Mr. R. E. Gilbert, president of the California Vocational Federation, as a member of the Council said, "We hope that we may be of service to you and we hope that you will be of service to us. As I understand it integration is the word and we know that all of our efforts ought to be integrated. We are very happy to have you as a member of our Council."

Vocational Education Program at N. E. A.

Dr. Z. M. Smith, president of the Department of Vocational Education of the National Education Association, has arranged a three-day program in Los Angeles as a part of the N.E.A. program next June. All three sessions will be held in the men's gymnasium at the University of Southern California.

First Session

Monday, June 29, 2:00 P.M.

Making vocational subjects available to rural high schools.—Dean J. R. Jewell, School of Vocational Education, State Agricultural College, Corvallis, Oregon.

An occupational analysis of the graduate student body of a metropolitan high school.—Mr. T. H. Nelson, Principal Roosevelt High School, Los Angeles.

Continuation school instruction for junior jobs.—Dr. Emily G. Palmer, Division of Vocational Education, University of California, Berkeley.

Second Session

Tuesday, June 30, 2:00 P.M.

The responsibility of the vocational teacher in industry.—Mr. B. W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles.

Standards of attainment in industrial arts for rural high schools.—Mr. I. S. Noall, state supervisor of industrial education, Utah.

The American Vocational Association in relation to the progress of vocational education in the United States.—Mr. C. M. Miller, state director of vocational education and president of the American Vocational Association, Topeka, Kansas.

Third Session

Wednesday, July 1, 2:00 P.M.

Joint session with the National Vocational Guidance Association.

Plumbers Learn Pipe Welding

The trade of plumbing is undergoing a radical change. From an old trade of screw joints and fittings it is going into a new trade of welded joints and fittings. This change necessitates a complete reeducation of journeyman plumbers. They must learn to use the acetylene torch and the electric arc welder. In the San Joaquin valley practically all of the refrigeration work and large plumbing installations have been taken away from the plumber and turned over to

the welder. As a result the plumber is fighting for his very existence as a recognized tradesman.

The plumbers' local union of Fresno, realizing this situation, worked with Director of Vocational Education, Lynn E. Stockwell, in establishing a pipe-welding course for plumbers. The course was organized in the Evening High School on a trade-extension basis. The organization of this class called for the purchase of approximately \$1,000 worth of materials and equipment. Fifteen complete Davis-Bourneville outfits for cutting and welding were purchased from the Air Reduction Sales Company. Materials for welding tables were purchased and the general welding trade-extension class constructed them.

The class meets Monday and Wednesday evenings from 7:15 to 9:15. It is made up of 26 journeyman plumbers in Fresno. The teacher, Mr. James Weldon, of Fresno, has had a very broad experience as a structural steel worker and welder, both oxy-acetylene and electric. He is a member of the local Structural Steel Workers Union. Mr. Weldon taught welding in the U. S. Naval Aviation School at San Diego for a time.

The advisory committee responsible for the conduct of this work is composed of Mr. Goedell and Mr. Newman representing the employers of Fresno; Mr. Creem and Mr. J. Dick, representing the local plumbers' union, and Mr. L. E. Stockwell, representing the public schools.

The course is planned to run a total of 24 weeks, or 96 hours. All of the pipe materials have been furnished by the employers of Fresno and the P. G. and E. at no cost to the school system. The work has been progressing in splendid shape and the attendance has been perfect. The public schools are rendering a real community service in the conducting of this class.

LYNN E. STOCKWELL.

Santa Barbara Offers Trade Extension Work

Advisory committees representing the various employers' organizations, the labor unions, and the vocational education department of the city schools are responsible in Santa Barbara for determining needs for units of instruction and for finding means for meeting the needs. A typical advisory committee for education in a given trade consists of two employers, two journeymen working at the trade, and two representatives of the vocational department of the local school system.

The needs may demand one short unit of work ranging from one meeting to ten evenings of instruction, or, as in some cases, may require a long course of study. In the latter case attempt is made to break the work up into a logical series of units. In all cases a carefully worked out list of the items of instruction necessary to meet the needs are developed by the committee with an estimate of the time necessary to present the content properly. Then the content for each evening's work is discussed, so the instructor may have a definite objective to meet.

Finding the instructor best suited to present the content as developed, is an important part of the committee's work. The best person to do the job is carefully sought and recommendations are made to the superintendent of schools. Such a person must be the best in the community from the standpoint of his technical ability, his standing in the craft, his personality, and his probable teaching ability.

Place of instruction, apparatus, supplies, and other instructional materials are discussed by the committee and recommendations made. The committee assumes the responsibility of making the proper contacts with their organizations for publicity and for recruiting the class. To assure a satisfactory enrollment before any expense is incurred in connection with the class, a signed list of applicants requesting the training is first secured.

The committee inspects the classes in operation, making suggestions for more effective instruction and encouraging the men and instructor by letting them realize that their own representatives are interested in the work.

R. L. SOULES.

Fire Department Training in Fresno

In line with the progressive city fire departments of the state, the Fresno Fire Department is putting on an organized training program for its officers and firemen. This brief report is concerning the teacher-training program for officers of the department. District chiefs, captains and nozzlemen are included in the groups receiving the instruction. The conferences are conducted two evenings each week, from seven to nine o'clock, Wednesday being given to platoon A, and Thursday to platoon B. The Fresno Fire Department is organized on the twenty-four hour shift and the officers come to the conferences during their off shift.

The preliminary conference, leading to the organization of the groups, was held on Wednesday, January 14 in the office of Fire Chief Williams. The meeting was attended by John C. Beswick, chief of the Bureau of Trade and Industrial Education, Fire Chief Williams, and Lynn E. Stockwell, director of vocational education, Fresno City Schools. Mr. Beswick gave in detail what was being done in larger centers in the state, in training firemen. Chief Williams, who is very progressive, was at once interested in setting up a teacher-training program for the officers of the department. He called a meeting of the district chiefs, at which time Mr. Stockwell presented the plan for training. It met with the unanimous approval of the chiefs. Details for carrying out the training program were then worked out by this group. The first regular training conference was held for platoon B on Wednesday, February 4, 1931. The first conference for platoon A was held on Thursday, February 5. The plan is to carry on a series of 15 conferences, a total of 30 hours. Seven of the conferences have been completed. The officers have shown a marked interest in the work. This is evidenced by the reports that come from the various stations, of officers putting into effect some of the principles developed in the conferences.

The purposes of the training program for officers are as follows:

1. To develop the ability in officers to train new men in firemanship.
2. To develop the ability in officers to upgrade old men in the service.
3. To stimulate the desire for further training.
4. To provide a training which can be used as one of the factors in promotion.

The work is to consist of analysis, teaching methods, and trial teaching. The groups meet in the assembly hall of the Central Fire Station. The conferences are being led by Mr. Stockwell. This training is a part of the public schools' trade extension program in the department of vocational education.

LYNN E. STOCKWELL

Training Welders at the Central Trade School, Oakland

By C. A. BRITTON
Central Trade School, Oakland

During the past two years there has been a waiting list of applicants for both junior and adult welding classes at Central Trade School, Oakland. At first glance it would seem that the schools would flood the market with pseudo welders. The facts, however, do not warrant this assumption. At Central Trade School welding instruction for adults is given only to men who are engaged in an occupation where welding supplements their daily employment, such as boilermakers, blacksmiths, plumbers, steamfitters, etc. Many of the younger boys are absorbed into occupations where welding is only a tool or secondary process of the trade. There are many differences of opinion as to the possibility of "making welders in a school." Instructors at Central Trade School are of the opinion that there is no substitute for experience. They try to make the training as nearly "job training" as possible. In some classes of work they come rather close to it, but realize that between the school student and the finished mechanic there is a "gap" which only experience on the job can fill.

The training objectives of the Oakland Central Trade School are to help the individual get a job, to help him hold it and later to help him secure a better one. This is accomplished by means of three separate and distinct types of classes in seventeen different basic trades.

1. Pre-vocational classes in which persons between the ages of 16 and 18 are eligible. The object is to provide them with sufficient exposure to different trades to enable them to make an intelligent choice of vocation.

2. Trade preparatory classes, composed of persons under 21 years of age who have definitely decided to follow the trade for which they are being trained. The objective is to prepare them for an advantageous entry into that trade, place them on wage-earning jobs, and guide them through their period of adjustment.

3. Trade extension classes, both day and evening, composed of persons over 16 years of age who are working at a trade where the training in school will extend their ability in the practice of that trade. The objective is to increase their efficiency and value in trade and industry.

All instructors conducting these classes have had sufficient years of actual experience working at the trade and are skillful enough to have received recognition as expert craftsmen. They have received a specialized training in the art of teaching and in addition to their school duties they make many industrial contacts with their trades.

The equipment in the school is the same as is used in industry. Industrial conditions are closely followed in the school shop. A considerable portion of the shop work is exactly the same as is turned out in industrial plants.

To facilitate the training of persons for special applications of the welding processes, short unit courses have been established to supplement the full course in fusion welding. Persons training to become all around welders would obviously require the full course.

Shop Facilities and Equipment

The welding department consists of an arc welding shop, a gas welding shop and a classroom. Ample space is provided for arc-welding booths and gas-welding tables. The arc welding equipment consists of an A.C. trans-

former and five motor generator sets of the latest industrial type. The gas welding and cutting equipment consists of 17 complete outfits of standard makes.

The general equipment is made up of a gas fired pre-heating furnace with swinging crane, a screw press for testing welds in compression, a hydraulic testing machine which will pull up to 150,000 pounds for testing welds in tension, and a high powered microscope for the examination of the structure of the metals. Other equipment includes an air compressor, power grinder, portable grinder, work tables, vises, anvils, jigs and the usual welding accessories and small tools. The equipment is the same as will be found in the best industrial shops.

Character of Training

In general, the training may be classified under two main divisions: manipulative and related trade knowledge. Industrial applications of the fusion welding process have been analyzed and classified. Organized courses of instruction have been developed with clear definite objectives.

Projects which show the industrial standard of workmanship are available to the learner so that he may see what his aims are and compare the result of his efforts. In addition to this a wall chart shows each learner's progress, both manipulative and technical, together with a rating of his character traits.

The instruction is arranged to take care of individual differences. As soon as a learner obtains the necessary proficiency on his assigned job, he is advanced to the next one without the loss of a moment's time. The jobs are arranged in the logical order of learning difficulty. Much of the work is performed on jobs of actual commercial value. In the classroom various teaching devices, such as motion pictures, demonstrations, still picture projection, etc., are used. Technical books for reference are at hand. Attention is given also to the development of habits of good citizenship and acceptable conduct on the job.

In trade extension classes a fee is charged to cover the cost of materials used by learners and in evening trade-extension classes a small tuition fee is also charged. A good business relationship exists between the school and many industrial concerns, which puts the school in an ideal position to place students, and every effort is made to place them on jobs for which they are trained.

Outline of Welding Courses

Course A is the general arc-welding course. The type of instruction is similar to the specialty courses but the projects cover a larger field and go into greater detail.

Manipulative instruction covers: dangers and safety precautions; eye protection; use and care of equipment; types of joints; preparation of work; assembly and alignment; tack welding and reinforcement; expansion and contraction; welding rods; fluxed, coated and bare electrodes; undercutting; welding of sheets, shapes, plates, pipes, castings, and containers in down hand, vertical, horizontal and overhead positions, high carbon and alloy steels; reversed polarity and hardfacing; structural steel welding; carbon arc welding and burning; phosphor bronze welding, finishing and testing; means of identifying metals.

Course A covers the application of the arc-welding process as used in boiler, blacksmith, railroad, and tank and pipe shops, in shipyards, foundries, structural steel work, ornamental iron work, maintenance, etc.

Course G is the general gas welding and cutting course. Manipulative instruction covers the projects outlined in course A and in addition, deals with fluxes, preheating, welding of iron castings, brazing of iron castings, bronze and brass. Elementary instruction on the welding of aluminum is given.

In the related subjects' work for both courses, the manufacture and chemistry of the welding gases is developed and a knowledge of the electrical terms and units necessary for an arc welder to know are included.

Metallurgy of metals, as it may affect strength and weldability, is taught by means of the following subjects: The manufacture of pig iron, the purification of pig iron, the basic and acid, Bessemer and open hearth process, the electric furnace, mechanical treatment of steel, physical properties, chemical properties, the constitution of steel, the constitution of cast iron, manufacture and properties of malleable iron castings, nature and purposes of alloy steels, heat treatment of steel, and composition and properties of the non-ferrous metals.

Course P is a specialty course of six units in the use of the acetylene torch for pipe welding. The course is suitable for plumbers, steamfitters, refrigeration mechanics, etc. Projects are performed on pipe up to and including six inches in diameter. For instruction on larger pipe it is necessary to make special arrangements. A companion course is also available for the electric arc-welding process.

Course S is a specialty course in the use of the acetylene torch for sheet metal workers. Previous instruction in layout, riveting, and soldering is presupposed. The course comprises six units. An elementary study of the theory of strains and stresses is also included.

In addition to the courses outlined, the welding department will extend all facilities in providing instruction for any applications of fusion welding which are not listed here, for example aircraft welding.—Courtesy Western Machinery World, September, 1930.

SCHOOL LEADERSHIP IN COMMUNITY WORK

Vocational education teachers in Santa Barbara are assuming a place of leadership in various occupational organizations. Mr. L. L. Ingraham, instructor of printing in the high school, was the leader in the establishment of the Santa Barbara Club of Printing-House Craftsmen founded at a recent meeting of 17 printing-house executives. Mr. Ingraham acted as temporary chairman at the organization meeting, having been largely responsible for getting the heads together to meet with the representatives of the national organization. The stated objective of the organization is to improve conditions in the industry and to discuss mutual problems. Mr. Ingraham is one of the directors chosen and Mr. Lee J. Verret, instructor in the junior high schools, is a charter member.

In a similar manner Mr. H. A. Sexton, coordinator for a miscellaneous cooperative training class, was one of the leaders in establishing a local Automobile Shop Proprietors' Association. The organization meeting was largely attended by shop proprietors and much enthusiasm developed concerning the possibilities for the association. Mr. Sexton

was named as a member of the committee to draw up a constitution and a set of by-laws. This work is now in progress.

R. L. SOULES.

Why Not Be a Better Craftsman?

By JOHN G. MILLER, Principal
Frank Wiggins Trade Evening School

Evening schools seem to appeal to two types of pupils: first, those desiring trade-extension training, and second, those who have a hobby, or wish to be entertained. The Frank Wiggins Trade Evening School of Los Angeles is set aside, by the Board of Education, to care for the trade extension field and only students who are anxious to improve themselves in a line of work that is related to their daily employment are eligible for entrance. Of all applicants only 25 per cent are actually enrolled; the other 75 per cent are recommended to other evening schools.

This school is seriously trying to carry out one phase of education covered by these three headings:

1. Vocational education, which emphasizes the ability to produce satisfactorily and to earn a living.
2. Citizenship training, which teaches the principles, and their applications, of getting along comfortably with others.
3. Development of information, appreciations, and abilities which enable a person to get some enjoyment out of life.

We are particularly anxious to take care of students who have completed our day school courses and now are out on the job. We hope to confine our selection of students to those who have made up their minds about a particular line of work. This is due to the fact that we are not in a position to take care of a great number of students. We prefer to have those who have definitely made up their minds to follow a certain trade. When students have not made such a decision it creates a continual changing procession of students, thereby keeping out those who are on the waiting list and who are anxious to promote their abilities along their chosen line.

Eligibility to our courses rests not upon units in school subjects, but rather, as has been stated before, entirely upon trade contact. We do not graduate students with a diploma, which should admit them to a university, but we do grant a card of completion for a particular unit of work, which will admit them to what we term "The University of the Open Air," where they will be able to find a job and make good in it.

At this season, our enrollment is greater than at any other time during the entire year. The last month's report showed 3,104 students in actual attendance during the month; one-third of them were women. Approximately 900 of these students are enrolled in classes which are held at extension centers outside of the main building, which is located on Olive Street, Venice Boulevard, and Seventeenth Street. The building is a fireproof structure with the height limit of eleven stories. The faculty consists of 100 members 50 of whom are individuals working in industry during the daytime, 22 teaching in other day schools, and 23 teaching in the day school of this institution. We find that we get greater efficiency from a teacher direct from the trade than from one who has not had recent trade contact, as they are well versed in technicalities involved in every-day experiences. They are in a position to assist the students with trade

contact which should mean rapid advancement. Special emphasis is placed upon the fact that the evening school students working in the trade and taking trade extension courses want to know exactly what the facts are that will give them a better opportunity in their occupation and unless the teacher is able to bring out these points the students do not care to continue their work.

A supply fee of \$1.00 is charged to students who enter the various units of work. This is necessary because of the varied line of materials needed in the 88 different trades which are being taught. Classes are held on the basis of short-unit work, the unit ranging from six to twenty weeks. Additional advanced units in some courses continue for another twenty weeks. All courses are standard trade extension subjects and are organized in accordance with the federal and state vocational education acts.

The Frank Wiggins Trade Evening School is a public school sponsored by the Los Angeles City Board of Education, named for Mr. Frank Wiggins, who was, from 1897 to 1924, secretary of the Los Angeles City Chamber of Commerce. It is not an endowed institution in any sense of the word. All instruction given is free to the public. Individuals file their application cards for the course desired, which must be related to their occupation, and as vacancies occur in the various units, or as new units open, these applications are taken from the file in the order of the date on which they were made. The evening school has no direct connection with the day school; that is, both the day school and evening school operate directly under their own personnel. The evening school principal's assignment is made on a full-time basis for the school year, this being necessary because the greater part of the time is spent in industry investigating new courses as well as those that are already in operation. The office hours are from one to nine P.M. on school days, and eight to twelve on Saturdays.

The list of evening school publications are as follows:

- Bulletin No. 101. Miscellaneous trades
- Bulletin No. 102. Drafting—Art and decoration
- Bulletin No. 103. Automobile and metal trades
- Bulletin No. 104. Building trades
- Bulletin No. 105. Printing trades
- Bulletin No. 106. Textile trades
- Bulletin No. 107. Electrical trades

Our slogan is "Why Not be a Better Craftsman." Our controlling purpose, therefore, is trade-extension training, providing school instruction to increase skill and knowledge or lead to promotion and advancement in the occupation of the worker.

Electricians Take More Training

Trade-extension training for electricians was started at Manual Arts Evening High School in Los Angeles in September 1929 with an enrollment of nearly 150 students. The training has continued without interruption since that time with an enrollment varying from 85 to 125.

The five classes in trade-extension electrical work are organized in steps so that a student may progress from the most elementary class to the most advanced class in succession. These classes are held every Tuesday and Thursday evening.

Elementary course.—The first class offers a course in elementary electrical mathematics with the content organ-

ized for electrical workers who have had little or no electrical schooling and less than eighth grade of formal schooling. This class is taught by Mr. James McConahey, who has had wide experience in practical electrical work and who is an electrical inspector for the city of Los Angeles.

Second course.—The second class is very similar to the first except that it is designed for electrical workers who have had ten or more years of formal schooling but limited electrical experience. This class is taught by W. B. Banning, another electrical inspector for the city of Los Angeles. Mr. Banning, who is a graduate of the University of California with a major in mathematics, is a very successful teacher of electrical mathematics.

Third course.—The third class is organized for more advanced students, mostly graduates from the electrical mathematics courses. This course is designed to give instruction in Direct Current and Direct Current machinery and controls. Every Thursday evening the class does practical experimental work in the electric shops, and on Tuesday evening they analyze and work out the results of all experiments on paper and on blackboard. Mr. Stanley Winkler, who teaches at the Los Angeles Junior College, is the instructor for this class. Mr. Winkler has had many years of experience with the Westinghouse Electric and Manufacturing Company before coming to Manual Arts High School, so is particularly well fitted to teach this course.

Fourth course.—The fourth course is organized for the graduates from the Direct Current course and is set up to give instruction in Alternating Current and Alternating Current machinery and controls. Every Tuesday evening this class performs experiments in the electric shop and on Thursday evenings they analyze the results of the experiments made the preceding Tuesday evening. The instruction in this class is given by the writer. All instruction is made very practical. Each experiment and lesson is taken from the trade, as we have found that any lesson or experiment not having a definite application to type jobs of the trade does not succeed. In other words any electrical instruction not having a very close relationship to the every-day job really is no instruction.

Fifth course.—The fifth class is organized to care for electrical workers who have completed our other courses. This course is set up to give instruction in wiring—layout work and estimating. The course covers layout work from a bungalow to a height limit loft building. The students do actual jobs of estimating from plans and specifications of buildings either already built or to be built in the near future. The class is taught by Mr. James Rogers who came to us from the field. He is an electrical estimator for one of the large contracting firms in Los Angeles.

Our entire student body assembles for a few minutes each evening when new code requirements are discussed and explained. This is a distinct advantage to our students as it enables them to keep abreast of all current changes in the electrical laws.

The student body membership consists of men who are wiremen, motor repairmen, maintenance men, and a few telephone and power station men. Nearly half of these men are members of the local unions in Los Angeles.

WALTER E. COBURN.

Vocational Home Economics at U. C. L. A.

By MARGARET C. JONES, Home Economics Teacher Trainer,
University of California at Los Angeles

A two and one-half year vocational curriculum in home economics is maintained at the University of California at Los Angeles in cooperation with the State Department of Education, under the provisions of the Smith-Hughes Act. This curriculum leads to recommendation for the secondary special teaching credential in homemaking. It is open to students who are high-school graduates and who have had at least four years of practical experience in the administration of a home. This practical experience, to be considered sufficiently valuable, should have been obtained after the age of eighteen. Hence this course of training is open only to women over twenty-two and under forty-five years of age.

Each candidate, before being certified to this course, must be approved by the department of home economics. She must pass an examination designed to establish whether or not her home experience has been of such a character as to warrant its being substituted as an equivalent of a certain amount of collegiate requirement for the training of homemaking teachers. It is further understood that all applicants be certified to the course provisionally until the end of the first semester's work when they are either given permanent certification, or are required to withdraw from the course.

The teaching credential awarded at the satisfactory completion of the course authorizes the holder to teach homemaking subjects in either a day or evening high school, a junior high school, or an elementary school, and to teach part-time homemaking for women or part-time compulsory classes for minors.

The women who enroll in this course are usually ones who are obliged to enter a wage-earning occupation to support themselves and family. Every year in this and in nearby communities there are many women forced to assist wholly or in part in the support of their families. It is often a momentous question to decide upon an appropriate line of work. So often women drop into whatever is at hand without considering whether or not it has any relation to their past training and experience. The intelligent and forward-looking woman should be reminded of the fact that her experience as a successful homemaker is invaluable as preparation for a teacher of homemaking subjects.

In 1917, under the provisions of the California Plan for Vocational Education, the State Department of Education initiated these training programs in the University of California at Los Angeles and at the State Teachers Colleges at San Jose and Chico. The state needs well-trained home-economics teachers and those with a rich, full background of practical home-making experience in addition to the theoretical and technical training, are certain to prove most acceptable.

The enrollment of from fifty to sixty carefully selected women yearly in these institutions has proven a definite asset both to the public school system and to the teacher-training institutions. In the last two years the enrollments have been as follows:

Institution	Years	
	1928-29	1929-30
Total	53	50
State Teachers College, Chico	3	7
State Teachers College, San Jose	26	21
State University, Los Angeles	24	22

The program for the training of experienced homemakers as home-economics teachers is set forth in State Department of Education Bulletin No. C-8, revised March, 1929.

HOME ECONOMICS TEACHER-TRAINING PROJECT AT CHICO

During the year 1929-30 the State Bureau of Homemaking Education initiated and promoted in connection with the Chico State Teachers' College, a practice-teaching project with the Chico public school system, making provision in connection with the general continuation class at the high school, for practice-teaching opportunities for persons training as teachers of homemaking subjects. The Chico school officials, including the local coordinator in the continuation school, have responded wholeheartedly in this project and provided a room for the work in the high-school building, which was equipped by the local board of education and the State Teachers College, to provide a diversity of teaching interests in the field of homemaking.

The project is regarded as an invaluable one for all parties concerned. Six students have received directed practice teaching in this real teaching situation during the past year. The amount of \$2200 is applied to the support of the vocational teacher-training program in this institution under the provisions of the California Plan for Vocational Education.

MAUDE I. MURCHIE.

PROJECT INSTRUCTION; HOME ECONOMICS

(continued from page 41)

project to develop. The child used must be a laboratory child that presents a definite clothing problem. These problems involve choice of material, properties allowing for growth, laundering, facility of getting on and off, children's choice, art principles involved, and skill in dressing and undressing is observed. After these students have had instruction in children's clothing, the clothing project with the children is undertaken. This type of correlation is to be developed further during the coming year.

A sun porch, sand boxes, gardens, and a portable victrola have been provided for use in this project. Parents are encouraged to observe the directed play of the children and also to extract a knowledge of play possibilities which can be carried on daily. The parents from time to time make reports of their interest in and their direction of the home play of their children, including games, learned through observation and direction through the project. Many homemaking students take the course in children's literature, which was recommended several years ago as one of the requirements for the homemaking credential.

Mrs. Margaret Coyle, who has carried the responsibility for the teacher-training project at San Jose for the last two years, has been given a leave of absence for further study during 1930-31. Miss Eugenia M. Provin has been selected as a substitute for Mrs. Coyle in this position. Miss Helen Mignon, who is head of the home-economics department of the institution, put much thought and effort into the development of these projects.

Future Farmers on the Air

A series of radio broadcasts was inaugurated in April by the Future Farmers of America, the national organization of boys enrolled in vocational agriculture in the United States. These programs, which will be monthly affairs, will be a part of the Farm and Home Hour of the National Broadcasting Company, and will be staged on the second Monday of each month.

Dr. C. H. Lane, national adviser of the F.F.A., opened this series of broadcasts on April 13. His subject was "What the F.F.A. is and does." Subsequent broadcasts are scheduled for June 8, July 13, August 10, September 14, October 12, November 9, and December 14. Arrangements are being made to notify all vocational agriculture teachers and pupils of these radio programs and to have classes and schools tune in on them each month.

The Farm and Home programs are broadcast from 12:30 to 1:30 p.m. Eastern Standard Time over 38 stations of the National Broadcasting Company network. The exact time of the F.F.A. programs during this hour is as follows: From 12:55 to 1:10 P.M. Eastern Standard time; 11:55 A.M. to 12:10 P.M. Central Standard time; 10:55 to 11:10 A.M. Mountain time, and 9:55 to 10:10 A.M. Pacific time.

In addition to these regular F.F.A. radio programs, arrangements have been made to broadcast special events of the organization such as the national F.F.A. public speaking contest and the results of two national judging contests of the organization, to be held in the fall at St. Louis and Kansas City, respectively.—Federal Board for Vocational Education release.

Night Schools for Farmers and Dairymen

A campaign of education to encourage the consumption of dairy products in place of substitutes was the main topic of the last session of the dairy evening school which has been in progress for two months at the Marysville High School under the leadership of R. W. Mitchell, director of vocational agriculture.

Speakers at this meeting included Mr. Sam Greene, secretary-manager of the California Dairy Council; C. E. Warren, principal of the high school; Colonel Robson of Tehama County, Seth Millington of Gridley, and others.

Mr. Warren struck the keynote of the school when he said, "This school belongs to the people of the community, is here for your service and we welcome any additional opportunity to work with you." Mr. Greene said, in part, in speaking of the expansion and general condition of the dairy business, "Some people wonder which kind of agriculture is really the best for the welfare of the community. The type of the community, the character of the soil, the climate, the tendency of the people must all be considered. It is confirmed in history that no scheme of agriculture has ever been permanently successful that doesn't include as some of its factors livestock and dairy cattle. A man who is a successful dairyman has to possess two attributes: One, willingness to work; and the other, a fair-sized knowledge of all the angles of his business. There are lots of so-called substitutes for butter, but there is none that approaches it in health-giving qualities. We have to have a law about oleomargarine because of the possibility of fraud in connection with it."

Mr. Greene, argued that the groceryman is not responsible for selling oleomargarine when people ask for it. Rather, people should be educated to ask for butter, then the groceryman will be unable to sell substitutes.

This particular evening school at Marysville had ten meetings, from November 4, 1930 to January 27, 1931. The average attendance was 59.6. Discussion included dairy laws, sanitation, diseases, feeds, cow-testing, dairy machinery, and dairy-barn and milk-house construction, etc.

The important features of the evening school are: first, interest in the school shown by a high average attendance; second, an attitude on the part of the students to get at the basis of dairy problems; and third, a final meeting addressed by state leaders to determine an industry-wide policy.

The service that Mr. Mitchell has rendered these Yuba County dairymen may be obtained in any community where a vocational-agriculture department has been established. Over 50 such schools were held last year, and the number is constantly increasing.

No move of recent years holds so much promise of aid to the practicing farmer as the evening-school movement. Secondary instruction is not for children only, but for adults as well. That adults are learning this may be seen from last year's statistics which show that more adults were enrolled than children.

Farmers must learn to study their problems and to work together. The agriculture evening school offers one of the best mediums now at hand to attain this objective.

A. G. RINN.

* * * * *

January and February seem to be the months most popular for adult courses in agriculture carried on by the agriculture men in the San Joaquin Valley district. Mr. Hooper at Porterville completed during the fall a general course in poultry with an average nightly attendance of 62. This spring he conducted a more specialized course in brooding and incubation. Demonstration trips to poultry ranches form part of the course. More than 20 poultry-men were in attendance.

Poultry and dairy courses are in progress at Modesto. An attempt is being made to keep the enrollment as low as 20 and to provide for more discussion and less lecture.

Turlock is carrying on a course in tractors and gas engines. A number of other schools in the district are likewise conducting successful night-school courses at this time.

E. W. EVERETT.

COURSE FOR LABORATORY TECHNICIANS

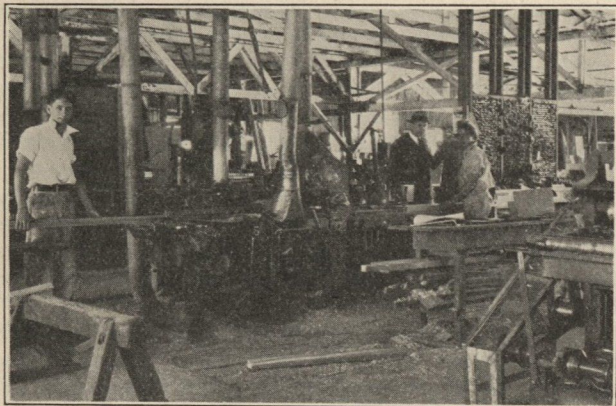
A course for laboratory technicians is being given in the Berkeley night school for young men in the San Francisco Bay region who are employed in the laboratories of the various industries in this district. More than one-third of the group are from outside of Berkeley, coming from Richmond, Vallejo, Oleum, and other nearby towns.

Richard H. Behrens is the instructor in this course. In the class are men from many types of industries and men with varying preparation in chemistry, but starting with their particular type of work as a basis, he has given them practical work in volumetric analysis and other work usually reserved for college students of chemistry, and finds that they can readily learn these more advanced techniques.

This field of work which is rather unique in schools will be watched with much interest.

BOYS TRAINED WEEK-ABOUT

The picture shows two pupils of the cooperative training class at work in one of the cooperating planing mills in Santa Barbara. Four high-school students are employed in this plant on the week-about plan, two being at work and two being in school each week.



Mr. H. E. Weyler, superintendent of the mill, shown in the picture with the boys, is chairman of the educational advisory committee for training planing-mill apprentices. To his efforts is due, in large measure, the success of his committee in developing a training plan course of study for the trade.

Training in several trades, industries, and businesses, other than planing-mill work, is offered in Santa Barbara schools, and 28 boys are now engaged in cooperative employment of various kinds. Business depression has not seriously handicapped the program, but has aided it to some extent as employers are interested in methods of eliminating inefficiency of workers, while journeymen are acutely aware of the need for proper training for their children. The local school department is using its best efforts to serve both employer and employee.

Continuation Education Associations Meet

Alhambra Continuation School was host to the Continuation Education Association of Southern California on Saturday, March 14. Mr. H. O. Dyck of Los Angeles acted as chairman of the meeting. Mr. F. C. Weber reported on the December meeting of the Northern Association and on the exhibit and booklet which are being prepared for the N.E.A. meeting in July. Mr. A. E. Paine of Huntington Park reported on present legislation affecting continuation education. Miss Emily G. Palmer of the University of California reported on the continuation-education programs at the December meeting of the American Vocational Association in Milwaukee.

Mr. C. V. Denman of Santa Barbara presided at the business meeting which followed. The following officers were elected for the next biennium:

President—H. O. Dyck, Metropolitan High School, Los Angeles.

Vice-president—A. D. Stetler, Alhambra Continuation School.

Secretary—Elizabeth Buckingham, Ontario Continuation School.

Treasurer—A. D. Graves, San Bernardino Continuation School.

At the luncheon meeting Dr. Vierling Kersey, state superintendent of public instruction, spoke on the legislation of interest to teachers.

Sacramento was host to the Northern Association on Saturday, May 9. Conference leaders conducted discussions in the morning group sessions. These discussions were later summarized and reported at the afternoon session. The following officers were elected:

President—R. F. Aspinall, Fresno.

Vice-president—Edward Locher, San Francisco.

Secretary-treasurer—P. B. Maughan, Pittsburg.

LIST OF AVAILABLE PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 17. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High School Students. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

HOMEMAKING EDUCATION SERIES

- No. 1. Leaflet No. 5. A Study of Occupations, Other than Homemaking, Open to Women Trained in Home Economics. April, 1927. Reprint, February, 1928.

GENERAL VOCATIONAL EDUCATION SERIES

- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

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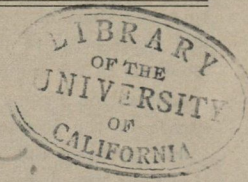
BERKELEY, CALIFORNIA, NOVEMBER, 1931

No. 4

Unemployment and the Machine Age

By JOHN C. BESWICK

Assistant Executive Officer, Commission for Vocational Education



We are in the midst of confusing currents today. The solution of social, economic, political, and industrial problems is taxing the ablest and sanest thinkers in government, business, and industry today. We, as teachers of trade and industrial education, should be asking ourselves what our responsibility is toward the relief of distress caused by unemployment all about us. Emergency measures and first aid, though necessary, must not be confused with permanent relief.

Leaders in business and industry realize the need for coordinated effort to work out a program that will minimize the economic disturbance caused by unemployment, whether unemployment be seasonal or caused by periodic business depressions (cyclical), or technological, that is, due to improved methods of production introduced by scientific research.

It is very important that school administrators (and those responsible for secondary education) have a clear understanding of our industrial civilization in terms of its educational needs, moreover, to acquire the philosophy of the age to guide them. We live in a machine age, hence, education as well as other public institutions, must be geared into the needs of this age, not into those prescribed by past generations.

The successful solution of the problem of stabilizing employment, in so far as trade and industrial education is concerned, requires the cooperation of all parties interested—employers, employees, and the schools. Before we attempt to fix our responsibility, let us survey the contributing causes and conditions affecting enforced idleness.

Economic Forces Affect Industry

A complexity of factors enters into the play of social and economic forces that are rapidly changing the status of all industry. The last century, particularly the last

twenty-five years, has seen more profound changes in the nature of our life and social customs than thousands of years that have gone before. These changes have spelled progress. Every stage of our national progress has been marked by a period of apparent economic chaos—from the

stage coach to the airplane; from the family as the unit of production to the modern industrial plant.

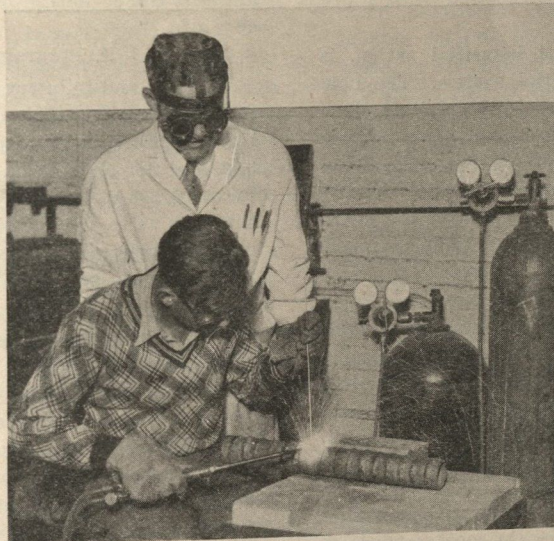
During each of these periods of economic distress the nation has learned something of such great moment that our progress after the depression has been greater and more solid than before. Developments throughout the world today parallel our own economic progress following our wars—first the depression, then extreme prosperity, followed again by depression. In times of prosperity we create our depressions, and in the depressions we are laying the foundation of our prosperity. Facing facts and weighing factors must stabilize our judgments.

During the past ten years science and invention have so

speeded up industry that overproduction of commodities has resulted. At the same time, however, profits increased, and a general prosperity was diffused, greater than that ever attained by any other nation. With it came high wages and high living standards. As a result, our country lost its balance and its sense of values. A mass movement into frenzied speculation followed. Securities were boosted far beyond the possibility of the industries' earning power to support them; and hence the crisis through which we are passing.

Foreign Policies Affect Industry

The decline in foreign trade, due to readjustments abroad, and fluctuating money values are also factors contributing to our depression and unemployment. Our social thinking must accept the fact that we and other nations



PIPE WELDING FOR PLUMBERS TAUGHT IN LONG BEACH EVENING SCHOOL

are inter-dependent. Economic disaster in other nations affects us. Our rich and powerful nation is no longer sufficient unto itself. We import tin from Bolivia and the Malay states, pulpwood for paper from Canada and Russia, sugar from Cuba, manganese from Russia and rubber from the East Indies.

We can not overlook or discount the effects of the five-year regulated industrial program that is being carried on in Russia, with cheap labor. They have imported vast amounts of American machinery and our technical experts to direct them in their enterprises. It will be interesting and worth-while to watch the effects of education on the Russians in the requirements of scientific production.

Education brings out individual differences. Will it create in the Russians the competitive desire for individual progress and develop individual initiative? If so, it means the beginning of the end of the socialistic system of that country.

France, having regained her mineral regions from Germany, is becoming an industrial nation. Germany, too, is adopting the most up-to-date American methods of machine production and scientific management. She is thus prepared to compete for world trade. Possible trade agreements between Germany, Austria, and Russia are worrying France.

Great Britain, once the foremost industrial nation, is suffering from a weakened industrial system. The dole system has cost Great Britain three billion dollars since the war. The government is taking 22 per cent of their total income in taxes. Certain leaders advocate the introduction of American methods and machinery to rebuild her industries and enable England to fight for her share of world trade. Free trade or tariffs and trade compacts with her colonies are political issues in England.

The selfish policies of European nations, high tariff walls, unsound banking systems, and after-war psychology, all combine to retard economic stability abroad, and reduce the demand for our manufactured goods. There is no leadership which can turn back the tide of these forces of readjustment.

Readjustments at Home Affect Industry

Business analysts in America feel that with securities and commodity values at low levels, the most needed adjustments have taken place. Inventories are low, which should indicate a wholesome outlook for increased demand for goods and hence for workers.

While public building projects and public utility development for the year 1931 will give employment to many, the time has come for all industry to forecast production and budget its work so as to stabilize employment throughout the year.

The world lacks an adequate philosophy and a program that will lead to the planned control of the machine for the common good. Let us hope that out of this depression such a world philosophy may come, that we may enter upon a new era in which the machine will be the means to a higher spiritual as well as material civilization.

Carried away by the increased production through mechanical power rather than by human power, we have lost our perspective for the time being. We forget that man made the machine which led to mass production and

lessened the human burden. Business and industry must organize and systematize the use of the machine so as to extend its benefits as widely as possible to help mankind. There are plenty of wants for the machine to supply which are yet to come.

A machine age requires a high level of human intelligence. The intelligence which can devise the machine can also devise a system to control it properly and solve the problems it creates. The fear that technological improvements, or the machine will lead to increasing unemployment is not sound.

During the past century, with the ever-increasing use of machine production, workers' real wages have increased three and one-half times; the number of occupations listed in the United States census rose to 4,000.

New machines create new and diverse occupations. The introduction of the linotype was feared at first, but the multiplication of jobs and increase of business far outweighed the temporary loss, though individual workers suffered.

One of the most striking features of the 1930 census is the percentage of shifts in occupations during the decade. There is always some loss of time between shifts and this is a serious problem and one which must be taken care of.

A Program Must Be Provided

Society and industry have profited through mechanical progress and it is their duty to provide a program of protection for workers displaced through improved technology, and not through any fault of their own. Society and industry are confronted with the problem of right social thinking as to the relative importance of the machine to society. The human intelligence that made possible the machine must be conserved, developed, and protected.

To promote the proper understanding and attitudes of the social aspects and ideals of production is one of the responsibilities of trade and industrial education through related technical instruction.

As mechanical progress advances—and it will—one of the chief means to conserve the human factor in industry will be an adequate retraining program. This is our job; trade and industrial education must be the stabilizer in this transfer of occupations. We must never lose sight of the fact that the fundamental factors in production are human intelligence, materials, and forces, but only in proportion to the development and conservation of the human intelligence factor is success possible with respect to the other factors.

From the history of trade and industrial occupations of the past we know that the industries of tomorrow will not be those of today. To keep up-to-date our knowledge of the principles, laws, and processes of economic organization, to keep pace with the growing technology, and to keep our learning adjusted to the changing status of industry so that it will be abreast of the economic structure of tomorrow, is the problem of trade and industrial education.

Not only must we train for occupations as they are, but we must shape our programs to retrain those whose jobs have been eliminated. That means training not only for one job, but for two or more as the need arises. This means a constant challenge to trade and industrial education.

The more complex and intricate the machine, the more intelligent and highly skilled must be the designers, the tool makers, repairmen, and the others who must keep the machine up to its highest efficiency in operation.

Industry Scraps the Obsolete

As chairman of the section on technical education at the meeting of the American Vocational Association in Milwaukee, I had occasion to note that practically all who appeared on the program were research engineers from the largest industrial concerns of the country. It was significant that the principal business of advanced industry today is research to improve technique. And that is why industry is changing, that is progressing; and a well-organized program of trade and industrial education must include trade technical and related technical instruction as stressed in the California Plan for Trade and Industrial Education.

The California Plan for Trade and Industrial Education is not a state, local, or personal instrument. It is a composite of the best thought of industrial, labor, and educational leaders, worked out in many joint conferences.

The A. O. Smith plant, in Milwaukee, is the outstanding example of the automatic function in industry. It was founded fifty years ago to manufacture baby carriages, later bicycles, and toward 1900, frames for automobiles.

Smith had vision. He had his machines designed and set up ready before the big demand came. By 1902 it had 10 to 12 frames a day output. Soon he called for plans from his engineers to turn out 5,000 per day by machine. Ten times the plant was built on paper at a cost of \$1,500,000, and when the factory was completed in 1920, \$6,000,000 had been invested in it.

Five hundred and fifty-two separate operations had to be performed on every frame. If one went wrong, the whole thing would jam! But it worked and is a commercial success. Smith says it is not an engineering success because human hands touch the frames at one or two stages. He says their chief business is engineering research, and for this purpose he has built a new research building costing \$1,500,000 for a thousand engineers. Their problems are: (1) To develop a product that is one of mass production; (2) to develop a product so much cheaper and better that it will sell on its own engineering merits, requiring no high-powered salesmen or advertising (they have but seven salesmen); and (3) to develop a product which must be profitable enough to pay for the investment in one or two years at the outside.

Their philosophy is to scrap anything that is not a jump or two ahead of the rest of the world, or to scrap it anyway if the research staff develops a better process!

In conferring the degree of LL.D. upon Mr. Smith, president of the company, Dr. Glenn Frank, president of the University of Wisconsin, recommended that educators might well follow the example of the Smith philosophy—to be *unafraid to accept innovations, and to be equally unafraid to scrap the obsolete.*

The spirit of the machine age challenges the school administration to scrap a school shop or plant which does not conform to present-day needs and standards, and not to set up a school shop or plant which will not conform to such needs and standards. There is no justification for

an obsolete plant in terms of students' needs, nor is there economy in its true sense.

Highly Skilled Workers Are Needed

We first visited the old "hand mill" of the Smith plant where two thousand workers were required to make the same number of frames as the automatic plant makes with two hundred.

In the automatic plant it is very noisy. There are no overhead belts; all is clear above. One man sits in a little tower manipulating control switches. Skills vary, some requiring but a few days' teaching, while others take months and months of intensive training. The design, erection, and repair work require the most skilled group of crafts ever known in any age.

Mr. Smith says the same process can be applied to other industries where demand warrants "million lots." The company sells an output of \$60,000,000 a year. Their steel pipe business is booming, making electric arc welded pipe at the rate of thirty-two miles of pipe per day. This has made possible transcontinental lines for gas and gasoline. Natural gas is being piped from Texas to Chicago.

In their tests for perfecting pressure vessels to withstand high pressures and high temperatures, they have added new and important laws to applied science. The most enlightened corporation management of today is looking far into the future. The research laboratories of industry are making contributions to the advance of pure science as well as the technology of their own industries. Science owes much to this modern tendency. It is becoming difficult to draw the line between pure and applied science.

Employment Must Be Secure

For the progress of industry as well as the endurance of our whole social and economic structure, the security of employment of those who work must be conserved. Unemployment insurance is being tried, and the experiments already in operation will be watched for their effectiveness.

Much thought and effort are being directed to the matter of employment stabilization, both on the part of the government, and private businesses or industries. The most promising and satisfactory plan appears to be such as has been in operation in the Proctor and Gamble Company for over seven years—that of guaranteed employment, or regularization of employment. They avoid all overtime and peaks in production through forecasting business and sales and thus arrive at balanced production. They guarantee forty-eight weeks of employment a year. They have in their employ 9,000 men and women.

During the year before this guaranteed employment plan was inaugurated they did a business amounting to \$8,629,447. The earnings of the company for the year 1930 were \$22,450,600 (with the same number of workers). For the last six months of 1930 the earnings were \$12,194,732, the greatest for any period in the history of the company, and that during a period of depression.

What have you been doing, and what has the California Plan for Trade and Industrial Education and the State Department of Education been doing to meet emergency situations arising from the protracted business depression?

(concluded on page 69)

Families Profit by Girls' Home Projects

By MAUDE I. MURCHIE

All-day programs in home economics for girls of high-school age providing emphasis on home-project instruction and related science and art were made possible following the apportionment to states of additional federal funds to be matched by state funds in accordance with the provisions of the congressional legislation known as the George-Reed Act. These programs are better suited to small high schools in rural communities than are the programs made possible under the Smith-Hughes regulations. There are two offerings in home-economics programs for girls of high-school age under the regulations of the George-Reed Act.

Under Program Plan II, the school administration may set up, for a given group of girls, a total of 120 minutes daily devoted to home economics and the related subjects, science or art, with a minimum of sixty minutes of this time devoted to the homemaking subjects. Two forty- or forty-five minute periods or one sixty-minute period daily devoted to homemaking subjects and one forty, forty-five, or sixty-minute period daily to the related subjects, science or art, will meet the requirement. The same group of girls must be enrolled in both homemaking and the related-subjects courses. Students enrolled in this program must devote to home projects approximately one and one-quarter hours a week. The teacher must be allowed two or three periods a week for project development varying with the length of the school period. The district must provide the necessary transportation costs for adequate home contacts for the supervision of home projects.

A second program available under the provisions of the George-Reed regulations as incorporated in the California Plan for Vocational Education is called Program Plan III. For this program a minimum of ninety minutes must be devoted daily to homemaking subjects for a given group of girls.

Both Plan II and Plan III must be organized as two-year courses.

The teacher for Program Plan III must be employed for one or more months longer than the regular school year for the promotion and development of home-project work in her community. This additional time may be distributed partly before the opening of the school year and partly at the close of school as best suits the needs of the community. From two to five periods a week must be allowed the teacher for project development, the requirement varying with the length of the school period. As with Plan II, the local district must provide adequate transportation costs for home contacts in the development of home-project work.

During the past year in connection with the George-Reed programs and several of the Smith-Hughes programs, many interesting home and school projects were developed. Through project instruction the normal home activities, experiences, interests, responsibilities, and relationships of the girls in their homes may be made to yield their maximum educational contributions as a vital part of the school training program.

Obviously, favorable conditions must be established between the school and the home to obtain desirable

growth and development in accordance with either of these plans. This means that the teacher must know the families and home life of her community. She must secure the appreciation by the family members, particularly the mother, of her educational program in cooperation with the home; and obtain the willingness of the mother to participate fully in providing a favorable opportunity for the girl to carry out her plan under home and school guidance.

Projects Reported by Schools

Several projects, as reported by the teachers in the state are quoted here.

Garden projects.—Ten flats of vegetable seeds and ten of flower seeds were planted in the school greenhouse for free distribution to the girls. Every girl planted some seeds. Flowers are kept in the classroom throughout the year. These are arranged in suitable vases chosen by the girls.

In school the class discusses the principles of flower arrangement with pictures and flowers to illustrate them. The various classes carried on flower contests. After studying the names of the common flowers the girls tried naming each variety in bouquets, the winners receiving the flowers.

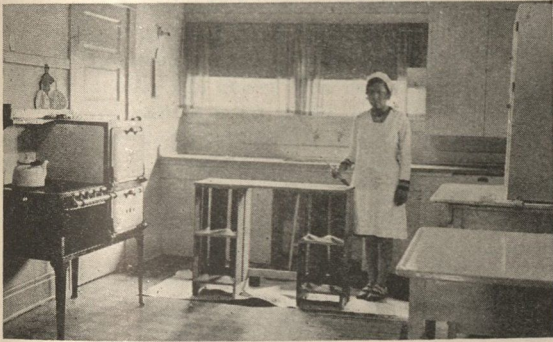
The class visited the best-kept gardens in the community and appreciated the beauty obtained by hard work. They, then, carried out various home gardening projects, themselves, thirty-three of which were completed. The agricultural instructor cooperated with the group, giving information as to preparation of plans for vegetable gardens twenty feet by twenty feet in size, showing the rotation of crops, how to plant seeds, make rows, and so on. This plan was used by many students who found a garden of this size would furnish adequately the vegetables for a family of six or eight. The parents were appreciative of the home gardens.

One Japanese girl planted a Japanese garden of both flowers and vegetables. One girl in a family of eight planned, planted, and cared for a vegetable garden, meeting the requirements for variety, and crop rotation. Another girl developed a beautiful outdoor living-room. The girls are very much interested in these projects and are planning additional gardens for next year.

Meal project.—In connection with the foods instruction one girl seventeen years of age planned the meals, did most of the marketing and prepared the evening meal for a family of six. Her mother is employed away from home four days a week and the girl had the care of her younger sister and brother. She planned her meals for a week at a time. Her plans for the coming week, the bills for the past week, and the time budget became a part of classroom discussion. She spent over one hundred hours on this project in one semester, and has since kept on with the work voluntarily. She has become a really good cook and serves well-balanced, economical meals. Her ability as a cake maker nets her a considerable sum. Her mother and father are delighted with her project work and are planning to send another daughter to the Smith-Hughes class as soon as she is old enough to attend.

Child care project.—The nursing unit had been very interesting and helpful to the group. One girl was obliged to leave school before the completion of the unit to work in a family, and had the care of two small children. She wrote to the class, "The boy does not mind very well. I have given him about twenty spankings. What shall I do now?" This problem was made a definite one for study by the class, and each girl wrote her a note of advice based on the study of child care and training.

The teacher in this class which is in a large city school, writes that she plans to call on every girl in her home-room and in the department during the summer. She feels certain that the home contacts will help decidedly in mutual understanding and cooperation with the home and in planning for more effective teaching.



TWO ORANGE BOXES AND ONE CAN OF PAINT

Dressing-table project.—The teacher in a large city school writes: "We found in our school that few girls had any attractive or convenient places to keep their own personal belongings such as underwear, hose, handkerchiefs, comb, and brush. In order to give meaning to our teaching of the rule 'A place for everything and everything in its place,' and to interest the girls in increasing the attractiveness of their homes at small cost, we decided to teach them how to make a dressing table from two oranges boxes, how to paint it, and how to make it attractive with dainty cretonne curtains. The cost depended upon the quality of cretonne used. We have made some tables at a cost of seventy-five cents. One we made for our homemaking cottage for two dollars and eighty cents."

Home management project.—Each girl was given as her home practice work the scheduling of her home responsibilities before and after school daily. One girl decided that she needed more time to help two younger sisters plan their share of the work so they might be neat and prompt. A few weeks experimenting with various plans did much in creating an interest in housework on the part of the younger girls, and soon they entered full-heartedly into the plan and became dependable in their responsibilities.

The oldest girl thereby gaining more time for planning improvements, felt the need for a more convenient kitchen and dining-room. The kitchen and dining-room had been interchangeably used as a kitchen with very little attention to working arrangements. After working out several plans for improvement, the girl and her mother decided upon a satisfactory kitchen and dining-room arrangement. The girl refinished the walls and woodwork. The working

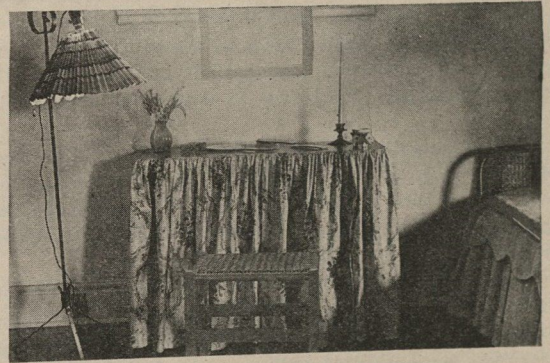
space was so greatly improved that electrical equipment was installed.

My last visit in the home was a delight to observe the anticipation and joy of working in the new room. The change was such a great improvement that the girls have grown much more interested in their home responsibilities. Encouraged by the progress of this one attempt the girl has taken her own room planning as her next project.

School lunch project.—In one family there are four children of school age. The girl in the homemaking class took the responsibility of putting up four lunches every school morning. She read a number of bulletins and articles on school lunches and studied the best methods of packing lunches. She planned the lunches a day in advance and often did some baking the evening before.

This project gave the girl added interest in foods and in the health of her three younger brothers. Because she tried always to add a surprise to the lunches, a very kindly spirit grew up between the older sister and the younger brothers.

A project in thrift.—One girl had the responsibility of planning and preparing dinners for a family of seven on Tuesday and Thursday evenings. Chickens, eggs, milk, cream, butter, nuts, canned and dried fruits, jellies, and jams were available at home. A study was made by the girl and by the class of a variety of ways to use eggs, milk, and nuts, thereby reducing the meat bill. Through her project more variety was added to the family diet at no additional cost.



ADD THREE YARDS OF CHINTZ

Personal hygiene.—The teacher of this group writes: All the girls come mainly from farms and do much outside work. To keep the nails clean is considered quite a task by the freshmen. The girl who carried this project read all she could find about the care of the nails in reference books, in advertising material which came with nail preparations, and asked questions of a manicurist. She was given a week-end manicure set and practiced on her nails. When she was ready she gave a demonstration of correct methods of nail care to the class, practicing on one of the girls and telling the reason for each operation.

Problem in finance.—One interesting project was carried on by a girl whose family was having financial difficulties. She remodeled and renovated her entire wardrobe, endeavoring to remake the garments with as little expense as possible and yet have them in style. She was surprised to find how good-looking remodeled clothes could be made.

(continued on page 64)

Horizontal Extension of Trade Training

By WILL C. MATHEWS
Central Trade School, Oakland

The increased demand for vocational education in Oakland is apparent in the steady growth in enrollment at Central Trade School, a day and evening vocational school. While out of the day enrollment of 1,064, there are some 500 compulsory continuation students, the remaining number are over eighteen years and attend on their own volition.

It is perhaps a changing philosophy in continuation education, developed in the last few years, that makes certain continuation schools throughout the country more popular than the old type of part-time institution. The new philosophy, if there is one, recognizes the fact that one important reason why we have continuation-school pupils is the desire on the part of most of these pupils to go to work. They leave the full-time school because they see no immediate return for the investment of time and interest in regular high-school studies. Many come to the continuation school with the question, "How long will it take me to learn enough to get a job?"

Training for a job in the shortest possible time necessitates eliminating all but the absolutely necessary content in the courses. For such intangible subjects as citizenship or cultural development as organized classes little time can be devoted in a busy industrial school which attempts to meet the demands of these prospective wage earners. Yet, wise teachers can do much in demanding the practices of good citizenship among their pupils which will form habits to be carried over to employment and adult life.

If the old philosophy were based on the belief that pupils dropped out of regular high schools because of poverty, and thus were being denied the fine things the high school had to offer, then a replica of the high school was found in the part-time school.

Central Trade School's aim is to prepare youths and adults for successful and happy pursuit of wage-earning lives. It attempts to hue close to the line, yet it recognizes that mere skill is only a part of the employer's requirements. The need for integrity of workmanship on the part of the welders of high pressure tanks is obvious. Should a dishonest weld be made, an exploded tank injuring life and property may result. Reliability in doing a fair day's work when the "boss is not looking," the dependability of regular attendance at work, or the sociability of getting on with his fellowmen are all demanded of workers. These are the necessary characteristics that Central Trade School instructors are encouraged to develop.

"Central" is growing horizontally rather than vertically in that an increasing number of different trades are added instead of building up larger single units. Our welding, radio, electricity, machine shop, and beauty culture classes could employ extra teachers to handle the demand. But, instead, when a new teacher is possible, a new department is added. Starting four years ago with one teacher in painting and decorating, Central Trade School now has twenty-two teachers, each representing a specific occupation.

There is also on the faculty a full-time counselor with duties of a vice-principal besides the part-time help of a nurse and two doctors.

The new courses added this year include radio service, bricklaying, and general shop, the latter catering to the needs of the group who will find employment in such trades as shoe repairing, janitorial work, car washing, shoe shining, and lower-level occupations. The trade school is fortunate in securing a man this year with a social service urge, a type of man who from conviction wants to champion the cause of the less fortunate. Mr. Raymond Sullivan has been placed in charge of the general shop whose function is a counseling one. An activity program mixed with group discussions on employment problems is doing much for a certain group of boys who come to the school. Mr. Sullivan has the ability and time to act as faculty advisor on student-body activities which brings about a unity of student body so much needed in a school made up of highly specialized departments.

The girls' program has been increased by the addition of one more teacher who came this year. Besides the beauty culture, cleaning and pressing, waitressing, and power sewing-machine classes, which are trade courses, the majority of the girls are taught homemaking. In this department girls are taught the duties every housewife of the average wage-earner's household should know. Such training prepares girls also for maid service or mothers' helper's work in which so many girls find employment.

The following list of courses are now found in Central Trade School's day program.

GIRLS' MAJORS

- Cleaning and pressing. (20 hours a week.)
- Cosmetology. (20 hours a week.)
- Homemaking, including cooking, sewing, personal hygiene, child care, and home nursing. (20 hours a week only.)
- Homemaking, including home nursing and sewing. (4 hours a week only.)
- Power-sewing. (20 hours a week.)
- Sewing, including child care and cooking. (20 hours a week only.)
- Waitressing, including cooking, personal hygiene, and waitress work. (4 or 20 hours a week.)

BOYS' MAJORS

(For pupils attending 20 hours a week)

- | | |
|-------------------------------------|----------------------------|
| Carpentry | Mill cabinet work |
| Chef cooking | Painting and decorating |
| Cleaning and pressing | Plastering and bricklaying |
| Drafting and estimating | Plumbing |
| Electrical maintenance and repair | Radio service |
| Employment problems and citizenship | Radio telegraphy |
| Machine shop work | Sheet metal work |
| | Upholstering |
| | Welding |

The same trades are offered in other sections to pupils attending only 4 hours a week.

The administration of Central Evening School is combined with the day school, in that the same principal is in charge of both schools, assisted by the day counselor. There is an over-lapping of the two programs, especially in apprentice training. Some of the apprentices attend both part-time day and evening classes in charge of the same teacher in the same shop. Apprentices also are promoted from the day to the evening classes on passing from the second to the third year of apprenticeship. Often employers are not willing to send an apprentice, over eighteen years of age, to day school even though the youth has not reached his third year. This single administration plan has the advantage at "Central" of meeting the problems arising from the use of equipment and supplies by other than regular day shop teachers. However, most of the day teachers teach night school in their own shops at Central Trade School.

The evening school this term has begun with an encouragingly large enrollment despite the depression and the tuition charged. It has been observed that even though certain large classes have been formed, showing the interest and evident demand for the training offered, it has taken considerable promotional work to stir up the group to want the training. In other words, one can not just open shop and wait for the customers to come in. The class of 35 gardeners all working at the trade, the class of 28 operating or stationary engineers or the 60 local fire department officers, the prize classes this year at Central Evening School, were brought into being only after considerable promotional work. These unusually large classes are being maintained on a conference method of instruction, requiring practically little or no instructional equipment. The large classes in radio telegraphy,

radio service, electrical and acetylene welding, beauty culture, electrical work, machine shop work, and cleaning and pressing are no doubt due to well-equipped shops where actual skills can be taught. This year, the more traditional classes, such as drawing, wood shop, shop mathematics, art, dressmaking, and others are low in enrollment but are the backbone of a night school. Highly specialized classes often run their course for a term and disappear, as was true at Central Trade School with grain-ing and marbleizing, refrigeration, ornamental sugar work, foremen conferences, diesel engines, and others.

The following is the schedule of the evening classes:

- Armature winding
- Building estimating
- Cake decorating
- Cosmetology
- Custodian's course in building maintenance
- Electrical theory
- Fancy pressing
- Fancy spotting
- Fireman's course in conference leading
- Hand composition
- Landscape gardening
- Linotype operating
- Machine shop work
- Mathematics and drawing
- Mill cabinet work
- Organizations and systems, factory supply departments
- Painting
- Plumbing
- Presswork
- Radio telegraphy
- Radio service
- Refrigeration and steam boiler theory and maintenance for stationary engineers
- Sheet-metal work
- Upholstering
- Welding
- Wood carving

Coordinating Business Education with a Rural Community

By JAMES M. BRAGG

Central Union High School, Fresno

The plan for coordinating the program of business education with the needs of a rural community at Central Union High School is simply one of carrying out the obvious need of adapting a rural high school commercial department to a study of rural business problems. The Central Union High School of Fresno County is a rural "community school," surrounded by raisin-grape vineyards in a district that is the center of raisin-grape production in the United States. A very large per cent of the children are from homes which depend directly or indirectly upon the raisin grape for an income. The city of Fresno and other nearby towns depend largely upon the incomes of the raisin growers to support the merchants, professional classes, and industries. Many of the "city jobs" are directly connected with the raisin after the product has left the hands of the producers.

Great tracts of vineyard ranches have been wrested from practically desert land, and the raisin crop is a capitalization of a local climatic condition favorable to grape growing and natural raisin curing. The growers are specialty farmers of a luxury crop depending upon the successful marketing of their single crop for their entire income.

Such raisin growers must face and solve various difficult business and economic problems if they are to preserve the splendid Fresno county civilization built up out of the desert-like land. They face a world-wide agricultural revolution. Farmers, many of them from the Europe of pre-war days, accustomed to old hand and animal methods, must compete with a merchandized industry. Such small owners may be forced to partnership or neighborhood cooperative ownership of expensive power machinery for the best use of necessary capital. The surplus raisin production of Fresno county must meet the competition of Australia and Africa in the world market, and partnership-owned power equipment may help to lower costs of production. Despite protection, the foreign market effects the domestic raisin market. Ignorance of the growers regarding the selling problems in our own eastern market has proved costly to the individual and to the community.

Many raisin growers have been guilty of economic sins. They have speculated in raisin land as grievously as have city people gambled in stocks and bonds. A community fault has been increased as the guilty raisin growers sought to overlook the law of cause and effect and hunted around to place the results of their own business crimes

on some convenient community goat. They willed to speculate and then wished to load the responsibility of the results of over-production upon the selling organizations or upon their own selling agents.

Conscious, intelligent action in business as well as in production seems essential if the farmer must produce for the market rather than for family needs. The modern farmer can hardly expect to escape marketing and business problems no matter how he longs for the good old days. It is foolish for him to think that he can wish his problems onto his marketing agents and it is unfair for him to expect his government to bear his economic wrongdoings.

The rural high schools should produce a generation of farmers who know their marketing. The Central Union Plan recognizes that the greatest need of the valley is to help farmers understand and solve their own business problems. The idea is obvious. Community self-help is possible through wide-spread, continuous, formal and intensive study of our own local bread-and-butter problems in the valley high schools, normal schools, and local colleges, not economics in vague generalities, but ours in particular and in detail.

For four years at Central Union High School in the raisin district the business department of the school has been used as the vehicle to spread the idea that the schools up and down the valley should obtain teachers prepared in the fields of agriculture, business, and economics to institute courses covering local rural business and marketing problems or use suitable subject matter in the commercial or other courses already in the curriculum.

Through the Central Union Plan, for instance, a three-year study of the economic history of our own local raisin industry was carried on; a study was made of the biographies of the industry leaders to analyze their methods, their successes, and their errors; an examination was made of the philosophy of the old-time farmer to determine whether it fitted modern needs and conditions; and a continual research of the various grapes and their products was carried on to understand their business and economic significance. The high-school boys and girls have studied the farmer's bookkeeping problems, the business problems of cooperative marketing and of private marketing organizations and have compared the findings, weighing their respective merits and functions. All such vital subject matter has been translated to the high-school level of understanding and ability.

It is suggested that boards of trustees, high school principals, normal school and college presidents in the valley cooperate with the rural industries to foster the spread of a study and analysis of our respective local agricultural business problems within the school curriculum so that in due course we may again enjoy that great satisfaction which comes from prosperity brought about by our own intelligent self-help.

There may come a time when we again will be thrown upon our own resources to finance our grape crop. A wide-spread industrial intelligence such as could be developed by a wide use of such business instruction might be our salvation in maintaining ourselves individually and as a part of a high-grade valley civilization.

An excerpt from a letter by a representative of the California Grape Control Board from Washington, D. C.,

to the instructor in the course at Central Union High School may be of significance. It states "... I am particularly anxious to see that this kind of work that you have done shall have a permanent and important effect on the future of agriculture in the state."

Vocational Education in 1960

By JAMES A. HULL

Professor David Snedden, for a score or more of years a friend of vocational education, has recently written a book entitled, "Secondary Schools in 1960." He presents the book in the form of a report of the Commission of the Chinese National Board of Education which has been sent to the United States in 1960 to study the American system of secondary education. This very interesting forecast covers the entire field of secondary education, but these quotations are confined almost entirely to the field of vocational education, stressing in particular the various methods and practices of industrial training.

Shortly after 1930, as earlier indicated, and almost simultaneously in several educational centers in the United States, an avalanche of articles and books dealing with educational values began to appear. The combined efforts of many critical thinkers presently produced methods or techniques of evaluating the effects on persons or their societies of hundreds of different kinds and degrees of the learnings which had most been fostered in schools. . . .

Almost overnight the older nebulous conceptions of "vocational education without vocations" were swept away, to be replaced by conceptions and terminology which incessantly deal with *specific* vocations—carpentry, barbering, restaurant cooking, stenography, corn-and-hog farming, auto-truck driving, and, literally, eight or nine hundred other concrete vocations which even in those days of meager sociological and psychological analysis it was practicable to differentiate.

Almost at once, too, the professors of secondary education and other theorists in this field ceased to cherish illusions that *any* really significant vocational training, except for the stenographer-typist's vocation, could be presented in the ninety-nine per cent of American high schools (excepting a few of gigantic size) which were then attended by over 90 per cent of all American secondary school pupils. Sociological analysis clearly proved that any one hundred boys, for example, entering any typical American high school at fourteen to fifteen years of age would, as economic conditions prevailed, be found fifteen years later distributed among seventy to eighty unlike vocations—one, perhaps, in bricklaying, two selling men's clothes, one a dentist, one a high-school teacher of physics, one a hotel cook, and so on.

Another early consequence was the disappearance, even in name, of distinctive characteristics in technical, mechanic arts, agricultural, and even commercial "high schools." Henceforth these became simply *high schools*—and all instead of some high schools developed industrial art, appreciation commercial, and appreciation agricultural courses, not for any expected functionings in vocational training or vocational guidance, but solely for the *enhanced culture, civic insight*, and other desirable qualities of *liberal or general education* to be derived from such experience-enriching studies."

Under the influence of the Smith-Hughes Act there had been developed in a large proportion of industrial centers day industrial schools, entered, as earlier shown, by large proportions of boys—and others by girls—as young as fourteen. But realistic study of the programs and products of these schools soon showed them to be highly inefficient. Many of them had become the "dumping grounds" of the less satisfactory pupils in junior high schools. Few of the pupils were genuinely motivated—

and at such early ages, under American conditions, could not be expected to be motivated—to work hard at the manual and mental learning of the vocations which it was supposed they were set to master. Practically none of these schools made any serious attempt to train to journeyman standards of competency those of their pupils who were being trained in the older-fashioned “handicraft” trades. Except in the machine shop vocations where, for specialists, no subsequent training might be necessary, only small proportions of the younger boys in these industrial schools eventually followed the vocations for which, supposedly, they had received part training.

Almost at once after this period of inquiry set in, the minimum age of admission to the Smith-Hughes all-day schools was raised to sixteen—and in 1935 to seventeen. But in the meantime many new developments of aims had taken place, and presently the old type of Smith-Hughes day industrial schools was merged into entirely new types.

Compulsory Continuation Schools

Before presenting the “1960 program of vocational education in the United States” the Commission reports on its findings about the compulsory continuation schools and extension courses in vocational work.

By 1935 it had become evident that the compulsory continuation schools offered practically no useful contributions to genuine vocational education—partly because their pupils were too young, partly because they were nearly all working in juvenile vocations which they must presently leave, partly because among one hundred boys or girls in such schools were commonly represented perhaps fifty different types of employment, partly because such schools could not provide specially trained teachers for the scores of vocations represented, partly because four or even eight hours a week was a poor allotment of time for real training, and mainly because few or none of all concerned—teachers, pupils, parents, employers, educational policy makers—really knew much about or realistically believed in, the values and practicabilities of vocational education through schools.

For, at bottom, nearly all practical men at that time still held the opinion that vocational competencies must be acquired “on the job.” Even employers believed that so-called industrial schools could only give some “trimmings” to vocational competency—though they often demanded that the schools—vocational or other—should teach pupils “how to think,” “to be industrious,” “to write a legible hand, or to be able to add.

The Extension Courses

Organized apprenticeship had largely disappeared in mining, manufacturing, transportation, and repairing by 1930. Hundreds of thousands of maturing workers found themselves lacking in preparation and were taking advantage of extension courses offered by colleges, philanthropic organizations, and other agencies. To quote again from the report:

But the critical methods of inquiry which had been achieved by 1935 discovered that of all forms of vocational education then being experimented with, these extension courses were, except under a few very favorable conditions, the most expensive and, by fundamental standards of educational values, the least effective of all. There were several reasons for this:

- a. The learners came to these courses after several years of often discouraging experience in learning vocations by pick-up methods.
- b. Even at best, the offerings tended to be over-technical, over-abstract, over-bookish for the types of learners coming to the school.
- c. Only seldom were the courses effectively coordinated with such “learnings on the job” as accrued from employment experience.
- d. Most of the courses were taken by learners at the close of an already fatiguing day’s work.

- e. The teachers were often acquainted only with the technical or informational aspects of the vocation, not even experienced in its practice, and therefore, could not vitally integrate their abstract technical instruction to real situations in the vocation.

Investigations showed that frequently fifty per cent of an evening class formed in November had persisted in attendance only a few weeks. . . .

As a consequence of much investigation the further development of part-time or extension education came to an end about 1935, and by 1940 only a few highly organized types of industrial extension courses were still being offered in urban evening schools. . . . The entire country was rapidly accepting the convictions that only through full-day schools could the increasing needs for vocational education be acceptably met.”

The 1960 Program of Vocational Education

Taking all the states of the United States together, the following are the essential legal and other governing principles of the systems of vocational education now in operation:

1. All persons must attend full-time schools of general education until the end of their eighteenth year.
2. All persons must be certificated as having completed a type of vocational training before engaging in remunerative work in the vocation based on that training.
3. Training for a junior vocation may begin at eighteen; for an operative vocation not under twenty; and for a mastership vocation not under twenty-five.
4. A training school for any vocation must either itself provide ample facilities for training through extended practical participation in productive work or must lease such facilities from commercial concerns.
5. Every learner in a vocational school must be in effect apprenticed to the school—as in former times vocational learners were apprenticed to masters or guilds or other guiding agencies.
6. The federal government gives financial aid and co-ordinating supervision to all forms of vocational education. . . .
9. All vocations or stages of vocations fall into three major categories: (a) Junior, Juvenile or Elementary; (b) Operative, Senior or Journeyman; and (c) Mastership, Directive or Ownership. Vocational full-time schools are provided for all vocations, though attendance is obligatory only on the first two types. No vocation may be entered until the worker has taken a specified course of training for it or met equivalent tests. . . .
13. Every person reaching an age appropriate to begin vocational training shall be given needful examinations, the results of which are designed to indicate:
 - a. The vocations for which he is not qualified.
 - b. The vocations for which, so far as tests reveal, he has nearly optimum natural and earlier developed abilities, tastes, and other qualities.
 From another source is furnished him information as to unfilled quotas or vacancies in the schools of his choice.
14. Every person seeking vocational training, on having his choice of a school approved, is provided with traveling, equipment, residence, and (if in another state) tuition money.

In conclusion, Dr. Snedden says that training is now being given (1960) in about 6,500 clearly differentiated vocations, and that the National Production Apportionment Board so regulates quotas of workers for each field of work that every worker must have an opening, and excessive “flooding” of any vocation is thus prevented. Such a program of vocational education including, of course, all professional education, requires an annual budget of approximately \$2,900,000,000.

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Continuation Education Homemaking Education
California Vocational Federation

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THE REWARD OF SERVICE IS MORE SERVICE

Most of the readers of the *California Vocational News Notes* have already learned of the reorganization of the State Department of Education as it affects the vocational program of the state. The former Commission on State and Federal-Aided Classes has been renamed the Commission for Vocational Education. The executive officer of the new Commission is the State Superintendent of Public

Instruction, the Honorable Vierling Kersey. As assistant executive officer of the Commission and directly in charge of vocational education in California the State Board named John C. Beswick, who also continues as Chief of the Bureau of Trade and Industrial Education.

Many friends, professional and lay, will rejoice in the appointment of Mr. Beswick to this position of responsibility. Not only is it a recognition of a long and splendid service to the cause of vocational education, but the Board in naming John Beswick chose a man whose qualities of leadership are unquestioned. Few men anywhere have had a richer experience or have played a more prominent part in the development of vocational education. His national reputation was clearly indicated by the enthusiastic and unanimous response which came from all over the country when it was learned that certain friends planned to present him a book of letters from co-workers. Rarely is it given a man to know what his colleagues actually think of him. John Beswick knows in a measure and that knowledge has stimulated him to even higher accomplishment in the work to which his life has been devoted. The State Board of Education, the Commission for Vocational Education, the teachers in the vocational schools, and the boys and girls for whom the whole program exists all are to be congratulated. The years ahead promise to be rich in achievement in all branches of vocational education.

It is fitting therefore that this issue of the *News Notes* should carry two recent articles from the pen of Mr. Beswick in which are set forth certain aspects of his philosophy of vocational education which are particularly appropriate to the period of economic strain through which we are going. No one can read these articles and not catch a new vision of his work, a new avenue of service.

EDWIN A. LEE.

DIVISION ANNOUNCES NEW STAFF MEMBER

The Division of Vocational Education of the University of California and the State Commission for Vocational Education of the State Board of Education are particularly pleased to announce the appointment of Mr. David F. Jackey as assistant supervisor of classes for the training of trade and industrial teachers, and lecturer in education at the University of California at Los Angeles. Mr. Jackey, who until November 1 was a member of the staff of the Chico State Teachers College, brings splendid qualifications to this new responsibility. He is a graduate of Carnegie Institute of Technology, a master of arts degree from the University of California, and has practically completed the requirements for the Ph.D. at the University of Pittsburgh.

After serving with the Trade Testing division of the United States Army at Camp Sherman during the great war, Mr. Jackey was for several years coordinator of trade and industrial education in Ohio during which time he had a rich experience in initiating and carrying out cooperative vocational programs.

As right-hand man to Mr. Benjamin W. Johnson, Mr. Jackey will carry his share of the teacher training program at Los Angeles. In addition he will give special attention to the preparation for publication of some of the excellent material which has been developed in recent years in the relative technical field.



CALIFORNIA VOCATIONAL FEDERATION

OFFICERS

President—Morgan N. Smith, Glendale High School.
 First Vice-President, Arthur E. Paine, Huntington Park Opportunity School.
 Second Vice-President—Wayne L. Johnson, Napa High School.
 Secretary—John G. Miller, Frank Wiggins Trade School, Los Angeles.
 Treasurer—Willard H. Van Dyke, Petaluma High School.
 Editor—James A. Hull, Alameda High School.

Responsibilities for Our President

The president of the California Vocational Federation received the following communication from the secretary of the California Teachers Association in regard to his duties now that the C. V. F. has affiliated with the C. T. A.:

You have been made chairman of the Committee on Institutes, Conventions, and Programs. The members of your committee are the secretaries of the six sections of the California Teachers Association.

It is probable that there will be no meeting of this committee until our next Council meeting in December. It will be necessary, therefore, for you to take up matters of interest and concern with your committee by correspondence.

Some time next spring there will be a meeting of the presidents and secretaries of the various sections of California Teachers Association here at this office. At that time I hope you will be able to be present in order that institutes and institute procedure may be considered.

Enclosed you will find a list of the members of your committee.

The Board of Directors has also appointed you to serve as a member of the Committee on Economics in Education.

Very truly yours,
 (Signed) ROY W. CLOUD,
 State Executive Secretary.

C. V. F. Annual Meeting at Los Angeles

The University of California at Los Angeles was host to the California Vocational Federation during its annual conference held on Friday and Saturday, June 26 and 27. The conference was attended by approximately four hundred vocational teachers from all over the state. Many people from outside California who were enrolled in summer-session classes in the state also attended the conference.

The Administrative Council held business sessions on Friday and Saturday with President Robert E. Gilbert in charge. The election of officers took place on Saturday afternoon. The members chosen to lead the activities of the C. V. F. during the coming year are listed above.

The most helpful features of the convention were the group conferences held on Saturday morning. Through the cooperation of William S. Kienholtz and his staff and the officers and members of the Los Angeles Vocational Association, trade groups were organized for conferences.

Each of the following affiliated state associations held their annual meetings on Friday morning: Industrial Education, Continuation Education, Aeronautics, Vocational Guidance, Occupational Research, Vocational Rehabilitation,

and California Agricultural Teachers Associations. A special section on women in industry was held under the leadership of Miss Laurine Broadwell.

Arthur G. Waidelich was chairman of the golf tournament held in the early hours of the morning. The cup this year went to Henry Cushman of San Francisco Bay district. The cup, which is perpetual, was held last year by A. C. Hargrave of Chaffee Union High School, Ontario.

Much credit for the success of the convention goes to our good friend and advisor, Benjamin W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles, for his splendid help, and to others in the University who promoted the interests of the convention.

George Henck of Pasadena was in charge of a fine industrial exhibit of machinery and equipment, placed on the stage of Royce Hall. Interest was added by a drawing for prizes donated by the exhibitors, which took place on Saturday afternoon.

Dr. T. P. Woellner of the University of California at Los Angeles was the speaker at the luncheon on Friday. His topic, "The Civic Values in Vocational Education," was a stimulating defense of vocational education. The Honorable Vierling Kersey addressed the convention at the noon luncheon on Saturday, pointing out the responsibility of teachers in analyzing the economic situation in relation to meeting the needs of a community. The Honorable Samuel M. Green, state assemblyman, and Dr. Edwin A. Lee, director, Division of Vocational Education, University of California, were the speakers at the banquet held on Friday evening at the Masonic Club.

The next meeting of the Administrative Council will be held in Visalia at a date to be set by President Morgan N. Smith.

California Industrial Education Association

The state Industrial Education Association met in Los Angeles last June with other similar organizations affiliated with the C. V. F. The first day of the program was arranged to cover three important problems confronting the trade teachers in the organization, as follows:

- Case studies of guidance problems—James A. Hull, Alameda High School
- The future in industrial arts—Dr. H. A. Sotzin, San Jose Teachers College
- Pre-vocational or industrial arts problems—Claude E. Niehart, Los Angeles.

The meeting was then turned into a conference group from which the following topics, questions, or problems were set up for discussion:

- Should not the related trade work and the academic work of the trade and industrial classes be equal to, if not more difficult than, the work in college preparatory classes?
- Should not the state provide material and equipment for teaching industrial-arts work?
- What can be done in the line of research to develop a better teaching technique?
- How may we have satisfactory industrial visits by our classes?
- How may we make our shop more nearly parallel trade conditions?
- How may we determine the responsibility for safety problems?

Each of the above topics was discussed somewhat and evaluated as to importance. No solutions were attempted, due to shortness of time, but interest was shown and topics of this nature will be introduced in future group meetings.

The second group meeting of the organization was devoted to the adoption of the constitution and election of officers for the coming year. The constitution, as prepared by the committee was presented the previous day in mimeographed form. After explanation and discussion the constitution was adopted, as presented, with one change. The change was to the effect that the dues be set at \$1.50, fifty cents of which must be paid to the C. V. F. for affiliation.

Following the adoption of the constitution, Robert E. Gilbert of Oakland, presiding, conducted the elections and explained at length the set-up of the state organization and its various affiliations. The following officers were elected:

President—R. J. Casey, Alexander Hamilton High School, Los Angeles
 First Vice President—Walter Hall, John C. Fremont High School, Los Angeles
 Second Vice President—Edward Jewett, Fort Bragg High School
 Secretary-Treasurer—Effie Jane Leatart, Polytechnic Special School, Los Angeles
 Editor—James H. Bedford, Herbert Hoover High School, Glendale
 Delegate to C. V. F.—A. W. Miller, Fresno Technical High School.

A determined effort will be made to bring about closer relationships between the affiliated organizations to the end that the California teachers of shop subjects will gain state recognition in their efforts to improve industrial education. Immediate steps were taken to start the organization functioning after the plan of the constitution by having the various section groups meet separately and appoint temporary chairmen and two delegates to the State Council of the C. I. E. A. who were empowered to take a report of the meeting to the various sections of the state and organize each section to coordinate with the state plan. The following temporary chairmen and delegates were appointed:

Southern section—

Chairman, C. E. Niehart, Los Angeles
 Delegates, Robert Thistlewhite, Los Angeles
 F. D. Olney, Los Angeles

Central Coast section —

Chairman, F. E. Peifer, Monterey

Bay section—

Chairman, Benjamin Spaulding, San Jose
 Delegates, Stanley Ward, Oakland
 E. F. Jewett, Fort Bragg

Central section—

Chairman, T. A. Ellestad, Visalia
 Delegates, F. C. Suiter, Tulare
 E. P. Myers, Visalia

CARPENTER HEADS CONTINUATION EDUCATION ASSOCIATION

The annual meeting of the Continuation Education Association of Southern California met in Los Angeles the last of June in connection with the C. V. F. Meetings were scheduled for only one day. On Saturday morning Irvin S. Noall, state supervisor of industrial education of

Utah led a conference on instruction material for continuation schools bringing out the conclusion that it is unfair to limit instruction to only a few vocations. A plan of directed job study which could be conducted by every employed pupil, no matter what his vocation, was suggested. In speaking of objective, reliable data which we can present to justify our work in continuation education, he suggested the following measures which may be used to check on the results of our work:

1. How many did we qualify for a job? How many not?
2. How many got a job on our training and made good?
3. How many were having job difficulties whom we diagnosed or trained to overcome weakness?
4. How many can trace advance to our training—job technique, personality?
5. How many parents can identify and evaluate our training?
6. How many employers can identify and evaluate our training?
7. How many personality problems did we resolve?
8. How many got a point of view on life that will help them carry on?
9. What evidence in this reduction or prevention of delinquency can you offer?
10. What information, skill or other tool was learned through our efforts and by how many translated into standard terms?

The source of such data lies in our case studies which we may present as reliable evidence.

After a luncheon meeting, which was addressed by Professor C. C. Widemann of University of Nebraska, the group was addressed informally by Superintendent Vierling Kersey. Officers for the ensuing year were elected as follows:

President—J. E. Carpenter, Sacramento
 Vice President—F. C. Weber, Los Angeles
 Secretary—Virginia R. Hubener, San Francisco
 Assistant Secretary—Mrs. A. H. Davies, Glendale
 Representatives on Administrative Council of the C. V. F.—J. E. Carpenter, F. C. Weber, and A. E. Paine.

R. F. Aspinall, Fresno, is president, and P. B. Maughan, Pittsburg, is secretary-treasurer of the Northern Association; H. O. Dyck, Los Angeles, and Elizabeth Buckingham, Ontario, are, respectively, president and secretary of the Southern Association.

Families Profit by Projects

(concluded from page 57)

Food habits developed.—In connection with food study work five under-nourished girls selected as their project, "Bringing my weight up to normal." First, food habits for quality and quantity were checked by the girls, based on the share-method. Their health habits were checked, and the girls decided upon their procedures. Four of the girls made excellent gains. One apparently had some physical defect not previously determined, but as a result of the study and of the physical examinations following, her tonsils have been removed. These projects were begun in October and the results were tabulated in February. To date, at the close of the school year, the girls have all held the weight they gained.

Conference Group Raises Questions

A group conference of instructors in building construction, cabinetmaking, reed work, and upholstery met at Royce Hall, University of California at Los Angeles during the annual meeting of the C. V. F. George W. MacKenzie of Lincoln High School, Los Angeles, was chairman of the meeting. Members of this group raised the following questions for discussion:

1. What class projects can be provided, upon which all members of the class will perform the same operations at approximately the same time, thus assuring that all members of the class attain the same skill objectives at the same time?
2. Upon what different projects can individual members of the class work which will assure that all members of the class attain the same mastery of skills in any period of time?
3. In order to handle large classes is it advisable to divide a group into two sections which alternate between bench and machines?
4. To what extent is it advisable to start capable boys on their own projects instead of forcing them to adhere to a set course as prescribed in questions 1 and 2 above?
5. To what extent should a teacher object to projects which are brought in from the outside and which are unsuitable for educational purposes?
6. To what extent is it advisable to interrupt the work of a class for a teacher-demonstration of an important operation, presented by one of the pupils?
7. What methods are effective in requiring that outside projects be accompanied by working drawings?
8. To what extent should beginning shop classes (as a group) be given preliminary work in fundamentals of the occupation?
9. Where can one secure a list of inexpensive class and individual projects?
10. What policies should be set up regarding boys doing school equipment jobs, and how can such policies be adopted and enforced by the administration?
11. Is it advisable and, if so, how can shop instructors secure segregation of students by grades?
12. In what way can school administrators and boards of education be convinced of the necessity of providing adequate shop equipment?
13. What efficient methods are there of handling individual student and student-body materials and supplies?
14. What educational advantages can be secured from providing a "browsing" library for reference work?

The twelfth question was selected as the one needing immediate study; but help in the solution of any of these problems will be gratefully received by the members of the conference group. James H. Bedford, who is the editor of the C. I. E. F., is designated to receive contributions on these questions. His address is Herbert Hoover High School, Glendale.

OFFICERS OF STATE AG TEACHERS' ASSOCIATION

The annual meeting of the California Ag Teachers' Association was held in San Luis Obispo, just preceding the annual meeting of the C. V. F. in Los Angeles. The following officers were elected for the year 1931-32:

President—C. O. McCorkle, Red Bluff
Vice President—Harry Alter, Ontario
Secretary—A. L. Price, Fair Oaks.

As the C.V.F. Editor Sees It

The editor for the California Vocational Federation is vitally interested in presenting through these columns articles, suggestions, questions, or criticisms, which may stimulate readers earnestly to consider and reconsider the problems we, as vocational teachers, face in the building of vocational programs which will function, not in the past economic conditions but now, and in the future.

Perhaps it is needless to say that our programs of vocational education are under fire. When we read current magazines, or consider such a book as Professor Snedden's "Secondary Schools in 1960," consult the feelings of taxpayers, listen to the honest questionings of the boys in our vocational classes, talk with general counselors, or perhaps quietly face the problem alone we find many disturbing questions. If we ask ourselves, "How many of those being trained for the vocations are actually placed and continue to work in the fields for which they are trained?" we become acutely conscious that there are unsolved problems before us which administrators alone cannot solve.

The columns of this paper, or some official publication of our organization, should be loaded, in every issue, with challenges which will demand of each of us his best; not only in doing his own piece of work up to the standard of his vision, but also in the purposeful searching for and helping solve the larger problems which we face collectively as state and national groups.

No doubt every one of us recognizes that there are problems vital to the future success of our programs and that each of us, sitting figuratively around a state-wide conference table, could, through the expression of his problems, experiences, and opinions help to solve these problems?

Let's be specific! Professor Snedden has dared to challenge our present program of secondary education in general, and has openly invited adverse criticism. He has made some disturbing statements about vocational education. Should the age limit for entrance to trade training be pushed forward to the eighteenth year? Should all persons be certificated as having completed a type of vocational training before engaging in remunerative work in that vocation? Should the federal government give financial aid to all forms of vocational education? Should a production apportionment board be created to regulate quotas of workers for each field of work? What should be included in the outline for trade training for a particular job or vocation? What should be the balance between the hand skill, technical training and so-called cultural training given to our workers to insure the desired type of citizen that can solve future industrial and economic problems?

Dr. Snedden invites criticism. Read his book carefully, then send to the editor of the C. V. F. your criticisms, favorable or unfavorable, and a list of questions you would like to ask Dr. Snedden on current problems. The best criticisms, pro and con, will be published in the California Vocational News Notes and the best questions will be sent to Dr. Snedden for his own answers. These also will be printed in a future number of the "News Notes."—JAMES A. HULL.

Transfer of Supervisors in Agriculture

A reallocation has been made along the regional supervisors in the Bureau of Agricultural Education, State Department of Education, starting July 1, 1931.

H. F. Chappell's headquarters have been changed from San Jose State Teachers College to the State Department of Education at Sacramento. His territory will include the Central and North Coast regions.

R. J. Werner will remain at San Jose State Teachers College and will have charge of the South Coast region instead of having a portion of the South Coast and North Coast regions, as he had last year.

E. W. Everett, formerly located at Fresno State Teachers College, in charge of the San Joaquin Valley region, will have his headquarters at the office of the State Department of Education in Los Angeles and will be in charge of the southern region. Mr. Everett will serve on a full-time basis this year.

B. R. Denbigh, formerly director of vocational agriculture in the Modesto High School, has been appointed as supervisor of the San Joaquin Valley region, with headquarters at Fresno State Teachers College.

A. G. Rinn will remain at Chico State Teachers College, and will be in charge of Sacramento valley region.

Future Farmers at Camp Condee

The establishment of Camp Condee at the Los Angeles county fair at Pomona for high-school vocational-agriculture students is expected to form the nucleus for a growing interest in the southern California exhibit for the Future Farmer group. Held for the first time this year, the camp attracted a total of 256 Future Farmers and their instructors representing 25 schools in nine southern California counties. Of this number, 165 boys and 24 instructors took part in the entire two-day program and the rest were on hand for the activities the second day.

The attendance exceeded all preparations for the initial session of the educational encampment and gave rise to the belief that Camp Condee will, within a few years, equal or surpass its older model, Camp Lillard in the north in number of boys in attendance. Dedication of the camp in honor of the late Robert A. Condee, former president of the state board of agriculture, was a feature of the first evening assembly. Formal dedication was made by Julian A. McPhee, chief of the bureau of agricultural education, in a talk, "Bob Condee, Agricultural Leader."

Judging contests for Future Farmers made up the principal activity the second day. Chaffey Union High School won the livestock judging contest with Chino second and Simi Valley third. Chino won first place in dairy-cattle judging, with San Bernardino second and Garden Grove third.

Shafter branch of Kern County Union High School took first place in judging dairy products, with Santa Maria second and Garden Grove third. John C. Fremont School of Los Angeles took first place in poultry judging and plant identification. Phineas Banning High School of Los Angeles took second and Chaffey Union High School third places in poultry, while San Pedro and Fairfax

High Schools of Los Angeles took second and third places respectively in plant identification.

Directors of the Los Angeles county fair were impressed with the showing made by Camp Condee in its first year and promised their cooperation for a greater encampment in 1932. Those in charge of the work predict an encampment of a thousand Future Farmers of America within three years.

G. P. COUPER.

Agricultural Education Moves Ahead

A plan for the correlation of the program of vocational agricultural education of secondary grade in the public school system of the state with the agricultural work offered at the California Polytechnic School, San Luis Obispo, was initiated by the State Department of Education on July 1, 1931. The Polytechnic School is used as a centralizing agency for the entire program of secondary agricultural education in the public-school system. Outstanding specialists in technical agriculture have been employed to teach courses at the school and to aid teachers of agriculture throughout the state in their various problems.

A program has been set up to offer to boys, who desire to enter farming occupations, terminal courses in vocational agriculture. Students must be at least sixteen years of age or must have completed the equivalent of the sophomore work in high school. High-school graduates will receive special attention. Students may specialize in vocational agriculture full-time or they may devote half-time to vocational agriculture and have available courses to meet high-school graduation requirements or non-vocational courses of junior-college grade in preparation for advanced work in degree-granting institutions.

Maximum flexibility is allowed students in choosing their courses, which are fitted to the needs of the individual rather than the individual fitted to the courses. Classroom work is reduced to a minimum, with the emphasis put on individual instruction. The length of time necessary for the completion of the curriculum depends upon the selection of courses and the rate of progress made by the individual.

At the present time there are 500 head of livestock of high quality, 2,000 birds of various breeds of poultry, and 1,400 acres of land belonging to the school which are being used for instructional purposes. Facilities are available for each individual to carry on a commercially productive project in the type of agricultural enterprise desired. There is a revolving fund available for loans to students to carry on this work. Students may make enough money, either through their project work or through available agricultural jobs, to pay part of their expenses while attending school. An attempt will be made to find positions for students upon completion of their work.

Living expenses are very reasonable. Board may be obtained at the school cafeteria for \$27.00 a month and room rent amounts to \$7.00 a month. New students may register at any time during the year.

Additional detailed information may be obtained by writing to the Bureau of Agricultural Education, California Polytechnic School, San Luis Obispo.

JULIAN A. MCPHEE.

State Fair and the Vocational Agriculture Program

Several years ago the men in charge of the administration of Smith-Hughes vocational agriculture in California recognized in the California State Fair an opportunity for the boy who is preparing to be a farmer. This idea took form when the first "Camp Lillard" was organized several years ago. Since that time each Camp Lillard has grown in size and importance with each successive year.

Camp Lillard is a rallying ground for the Future Farmers of America. Over 600 representatives of this youths' organization attended the 1931 state fair. They came from all over California and with each four boys was one agriculture teacher. They slept on straw in the old horse barns and liked it. They had never attended the state fair before, so were enthusiastic and excited. Some of them had brought exhibits, 470 head of livestock, 715 head of poultry, and a variety of field crops, all of which they had raised. Some brought farm-mechanics projects which they had made. They were competing for prizes. In convention assembly they voted on who should attain to office and to higher degree, executing their responsibilities with judgment, making important decisions.

What is the educational value of such activities? One can only guess, but surely there is vast significance in a boy's raising a fine animal, taking it to a fair, caring for it while there, showing it in competition with his fellows and against adults, taking his medicine along with the rest. Nothing in educational value takes the place of an organization of boys conducting its own meeting, electing its own governors, deciding who shall be promoted. And when you have both of these values in one, as at Camp Lillard, you have a real school.

A. G. RINN.

PUBLICITY CONTEST

A group of Smith-Hughes agricultural teachers in the San Joaquin valley felt they should encourage worthwhile articles in their local newspapers, and decided to stimulate such an enterprise through a rather novel scheme. With the aid of their regional supervisor, E. W. Everett, they succeeded in getting the Fresno Morning Republican to offer cash prizes for the three best publicity scrapbooks. The first award of fifty dollars was won by Hanford Chapter Future Farmers of America. This book contained one hundred and forty-two articles which had been published in various newspapers, one article having appeared in the national paper, *Christian Science Monitor*. Many had been run in sectional agricultural papers. The Madera Future Farmers Chapter won the thirty dollar prize for second place, and the Modesto chapter won the third prize of twenty dollars.

The regulations were that the article had to appear during the school term, not over 20 per cent could be submitted by the instructor, and the remaining 80 per cent must be written and submitted by the students. Weighted credit was allowed for each article submitted on the circulation of the publication.

This contest without question stimulated the different Future Farmer chapters to publish articles on their activities, and thus to put their story before the public.

Even the instructors who had exhibits entered in this contest secured valuable training in editing and submitting newspaper articles.

R. B. DENBIGH.

Continuation Education Exhibit at N. E. A.

Occupying an attractive section of the exhibit space in the Shrine Auditorium in Los Angeles, during the N. E. A. Convention last July, a very interesting exhibit of the work of continuation-school pupils in California attracted much attention. The continuation schools of Eureka, San Jose, Carpinteria, Fresno, Glendale, Pasadena, Los Angeles, Huntington Park, Long Beach, San Bernardino, and San Diego were represented in the exhibit.

Two kinds of material were sent: products of the trade, craft, homemaking, or general-shop classes; and samples of instructional material. In the first group were exhibits of clothing including dresses, coats, hats, pajamas, and underwear; art and needlework, including towels, bags, needle cases, luncheon cloths, napkins, bridge sets, pillows, wall hangings, baskets, artificial flowers, posters, sketches.

There were shop projects including inlay work, fishing poles, tools, electrical apparatus, hunting knife, blue prints, wood carving, desk set, soap carving, picture frames, etc. Commercial projects included completed bookkeeping sets, business letters, and samples of typing and of mimeographing.

A journalism exhibit attracted much attention. Seven samples of newspaper work were shown. With them were certificates of excellence, cups, plaques, and medals won in contests by certain continuation schools of the state.

A few schools sent samples of portfolios or notebooks showing work done in academic subjects and several schools sent excellent pictures showing the various departments of the continuation schools in action.

The exhibit of material showing the plan of instruction was, perhaps, the most unique part of the exhibit. Three items deserve special mention since they indicate a method of "directed self-instruction" which many pupils may be encouraged to pursue.

A notebook containing a study of hand-made lace was compiled by a girl who worked at the lace counter of a department store. Small samples of many kinds of lace were mounted and below each was an accompanying description of the lace, a statement of the country from which it came, and other items of interest about it. A notebook made by a boy who worked in a jewelry store dealt with precious stones. The country of origin, the chief characteristics of the gems, and how to identify them, were also given. A card file made by a girl who worked in the yard-goods department of a store showed samples of various kinds of cloth with information regarding means of identifying the material, washing and wearing qualities, etc.

It would be a pleasure for any customer to be served by any clerk who is so well-informed as must be the three young people who made these studies. It is through such individual projects that the continuation school can redeem its promise to the employer to make his young employees more efficient.

Trade Teachers Must Keep Pace with Modern Technology*

By J. C. BESWICK

On behalf of the State Department of Education and your State Superintendent of Public Instruction, Dr. Vierling Kersey, I congratulate you upon the successful completion of your prescribed course in teacher-training. We expect that your course here has developed in you a clear understanding of the philosophy of vocational education, the technique of teaching, appreciation of your responsibilities, and further an enthusiasm to attack whole-heartedly the problems in the field of service you have chosen to enter.

The best thing that I could wish for you at this time is that you might catch and hold the full vision of California's opportunity to lead the nation in a secondary-school program geared into the needs of our industrial civilization and of your own opportunity for leadership in your particular part of this great scheme!

Social and economic forces are rapidly changing the status of all industry today. Science and invention have been largely responsible for the tremendous progress of our industrial nation. Every stage of our national progress has been marked by a period of apparent economic chaos. The crisis through which we are now passing offers its challenge to trade and industrial education.

As teachers of trade and industrial education you will be called upon, through your training programs, to help solve economic and industrial problems which are taxing the ablest thinkers of our day. California today presents richer opportunities for service in the field of trade and industrial education than ever before. This is due not only to her steady population growth and increasing industrial development, but to what is more significant, a better understanding, and hence a changing attitude on the part of leaders in education, business, and industry towards the social and economic value of trade and industrial education.

The attitude of indifference is being gradually displaced by the realization of joint responsibility and by active cooperation between the schools, business, and industry, all working toward the common objective. This is a most hopeful sign, pointing the way to greater success in our undertaking.

We must not be impatient or think that progress in vocational education is slow. We must patiently strive to reach the great democratic ideal of developing each individual and of adjusting ourselves to the changing structure. Progress in a stable society must necessarily be conservative. It is quite possible that radical changes may overthrow society instead of improving it.

It takes a long time to change mental attitudes. It took a million years for even a percentage of the human race to change from the attitude of primitive man to the type of men who today tax themselves for public education.

California has made great strides in overcoming the traditions of class education. For ages educational philosophy took account only of abstract intelligence and placed the emphasis in education upon preparation for leisure. The pressure of social and economic demands of

present-day life is forcing upon us the modern educational philosophy which places an equal valuation upon social and vocational intelligence. The old idea of culture associated with the training of abstract intelligence is being forced to yield to such modern thought as this: Man's efficiency in his vocation may be the best index to his culture.

Work is not only a necessity, it is an opportunity for service and a badge of citizenship. Through work we achieve health, retain mental balance, and secure brotherhood. Success in a happily chosen vocation provides expression of personality; therefore, contentment and happiness. It usually makes one a better father, husband, neighbor, and citizen. It is the man highly educated, but unable to make a living, who becomes discontented and sometimes socially dangerous.

A carefully organized program of trade and industrial education, such as is provided for in the California Plan, is not narrow. It admits of much cultural value. The instructor is the key man in any training program. A good teacher may achieve considerable success with a mediocre plan, but a poor teacher cannot get satisfactory results with the best-planned program.

As a teacher of trade and industrial education, your equipment must be two-fold—the ability of the craftsman and teaching ability. As an outstanding craftsman in your particular field, each of you, I take it, is possessed of the requisite skill and knowledge to qualify as an efficient producer. Your experience enables you to turn material goods into economic uses, to advance the happiness and prosperity of mankind. Such ability is basic to your success both as a craftsman, and as a teacher of your occupation.

As an instructor you are called upon to handle precious human material, the most important factor in the whole scheme of advancing human welfare. The skill of the artist or artisan, or the skill of the architect, is secondary to the skill required to mold personalities, heightening ambitions and improving personalities, as well as craftsmanship.

Therefore, you should make a self-analysis and determine for yourself whether you possess certain personal qualifications which, experience has shown, successful teachers possess. In addition to the necessary *knowledge*, the generally accepted standards require certain definite qualifications. Leadership is of paramount importance. If you are to lead your students, you must have tact; the ability to plan; to command attention through securing the interest of learners; the ability to inspire effort in others; and the ability to impart knowledge.

Does your personal catalogue contain such attitudes as loyalty, optimism, enthusiasm, interest in other people, the desire to help them, and also fairness in your dealings? The aptitudes regarded as necessary include the ability to cooperate with others, willingness to accept responsibility, vision, initiative, originality, and capacity for growth in your job.

It will be well worth your while to study yourself and measure yourself by such standards. I believe, when I say

* Address delivered to graduates of vocational teacher-training course, University of California, Berkeley, July 30, 1931.

that seventy-five per cent of your success will be determined by these personal qualifications, that I am not putting too much emphasis on the personality factor. The factors that constitute a good teaching personality can be cultivated and developed.

The great responsibility of preparing youth to compete in the most complex civilization ever known, requires a teaching personnel of the highest order. In this highly organized, scientific and mechanical age, it requires the highest level of intelligence to keep pace with our industrial civilization.

To meet the increasing demands of a growing population of high living standards, we have become a great industrial nation. Industry is fundamental. It is the actuating force of all economic activities of our modern life.

Our economic structure is becoming so increasingly vast and complex that business and industry are placing a correspondingly high valuation on people who are trained to think, to analyze problems, to acquire knowledge, and to apply this information in the solution of problems. To make progress, industry must acquire and apply to economic uses the new knowledge that is being added by scientific research, discovery, and invention.

The happiness and welfare of our people are dependent upon the success of industry, for most human wants are supplied by industry. One of the chief factors for success of industry is intelligent, well-trained workers. Human intelligence, materials, and forces are the principal factors in production. Only in proportion to the development of the human intelligence factor is success possible with respect to the other factors in industry.

The sole source of progress is the development of the individual. As a state or nation we cannot rise above the level of the individuals comprising the group.

The aim of the California Plan for Trade and Industrial Education is not to develop a mere mechanical worker, but to improve a human personality; to render him capable of sustained and intelligent effort, equipped to become a responsible and respected member of society and a citizen of our great state.

What is more fundamental to good citizenship than to fit an individual to become an efficient producer in work best suited to his intelligence and aptitudes; and, further, after he is employed, to provide facilities which will enable him to adjust himself to the changing conditions in our economic organization?

Education is the keynote in industry today. New skills, new processes, and whole new industries are being developed under modern conditions.

The reorganization of our curriculum has not kept pace with the rapid changes in the economic and industrial phases of society. In view of these changes, progressive teachers will take the lead in adjusting the curriculum to meet the developing needs.

We cannot hope to approach the desired standards of efficiency in any program of trade and industrial education unless our teachers keep their knowledge of the principles, laws, and processes of economic organizations and of the growing technology abreast of the changing structure. Not only must the school go into industry, but industry must be brought into the school.

From the standpoint of the State Department of Education, the problem of promotion will be largely concerned

with training on the job. In keeping with the principles of sound sociology, we anticipate a gradual development of organized apprenticeship training in individual plants or in a group of plants. Such new development will require well-trained progressive teachers.

During the many years I have been associated with the work in the State Department, I believe one of the most progressive steps has been the appointment of local supervisors to be directly responsible for the programs of trade and industrial education in the various local communities. As rapidly as conditions warrant, the supervisory program will be expanded.

The next forward step in our teacher-training program will be the carrying of teacher-training into industry. We expect great things of this department of teacher training.

This summer the University of California at Los Angeles and Berkeley has offered courses in training especially for leadership in trade and industrial education. This plan has been a part of the California Plan for the past several years. The Division of Vocational Education of the University of California is taking a very progressive step in this matter, and I trust you all will continue your teacher-training by completing the leadership courses, as you have just completed your required teacher-training, so that you will be prepared to render a greater service when the opportunity presents itself.

Unemployment and the Machine Age

(continued from page 55)

I will cite just a few illustrations of completely organized programs that have been inaugurated as a direct result of the depression, and which have stabilized employment in the particular fields of work:

Raymond-Granite Union High School—McGilvray-Raymond Company Plan

Southern Pacific Company—Railroad Plan

Welding for Plumbers

Northwestern Pacific Railroad Company—Morse Telegraph Training Plan

Night school training programs have been established in many trades for workers to supplement their daily employment, and to make possible increased efficiency, so that they may hold their jobs in the keenest competition, or to improve themselves in their trade so that they can get jobs.

Every dollar of Federal and State and local money invested in trade and industrial education makes for a sound social and economic structure, for greater wealth, greater happiness, more leisure time, and greater stability. Our social and economic lives are inseparably interwoven.

CONTINUATION EDUCATION IN THE SOUTH

L. B. Travers, chief of the Division of Adult and Continuation Education, gave the address of the morning at the October meeting of the Continuation Education Association of Southern California held in Riverside. Mr. Travers spoke on "What's Ahead in Continuation Education for the State of California." Half-hour round table discussions on The Fifteen Hour Program, The Four Hour Program, and The Adult in the Continuation School preceded the luncheon at the Mission Inn where A. D. Stetler of Alhambra presided. State Superintendent Kersey was the luncheon speaker.

Continuation Education at the State Fair

The continuation high schools of California which took part in the state-fair exhibit this year are to be commended for the hearty cooperation which was such an important factor in its success. The schools entered in the exhibit were Metropolitan High School of Los Angeles, Carpinteria, San Francisco, San Jose, Watsonville, Santa Rosa, Eureka, Berkeley, and Sacramento.

The organization of material was handled by a statewide committee with Mrs. Gladys M. Hayford, Sacramento, as chairman. Other members of the committee were Mr. F. C. Weber, Los Angeles, Miss Ruth L. Turner, Berkeley, Miss Virginia R. Hubener, San Francisco, Mrs. Margaret G. Lomax, San Jose, Mr. R. F. Aspinall, Fresno, and Mrs. Mabel D. Hall, Watsonville. Mrs. Hayford communicated with each member of the committee who, in turn, contacted each school assigned to him. It was hoped that more schools would participate, but since this is only the second year of the continuation-education exhibit, the percentage may be considered fairly good.

In a large project of this kind it is absolutely necessary to have the entire cooperation of the schools. Plans should be well laid before the close of school in June, and all exhibit material should be in Sacramento in plenty of time for arrangement.

Features of the exhibit included:

San Francisco's excellent printing display, which won second place in all high schools.

Inlaid woodwork from Los Angeles shops.

Demonstration of the training of a grocery-store clerk by Sacramento. A model grocery store made the situation a real one.

Work exhibited illustrating training for the use of leisure time included beautiful woven pieces and hooked rugs from San Jose, Watsonville, Santa Rosa, San Francisco, and Berkeley.

Representing domestic science there were garments and canned fruits and vegetables from San Francisco, Berkeley, Los Angeles, and San Jose.

Berkeley Continuation High School won the sweepstakes prize in this section. Various suggestions have been made for the improvement of the display as a whole. One of these is that only the one best article of its kind be sent from each school. This year the booth was rather crowded. Selecting the one best article from a school would arouse healthy competition during the term in each school, and would present an exhibit of the highest quality.

Another question was asked. What could we exhibit that would more clearly show the place we take in giving training for employed boys and girls which will help them on their jobs? Several suggestions have been made. One

was that the projects which are given to the different working boys and girls be displayed. For example, Los Angeles had a book on display at the N. E. A. convention showing the work of a girl in the lace department in a Los Angeles department store. She had looked up merchandise information that would be invaluable to her in her work. This idea could be followed out for various types of jobs.

Next year's committee will have to revise the premium list for competition. This must necessarily be done very soon, so that each school will know how to plan to meet the conditions set up. The excellent start made by the continuation high schools of the state is shown by the many questions asked about continuation education by passersby.

GLADYS M. HAYFORD.



First Commencement at Berkeley Continuation School

Berkeley Continuation High School held its first commencement exercises on June 3. The program was built of musical numbers, and ballet dancing by members of the school. H. N. McClellan, principal of the continuation school, spoke of the growth of the school in the past few years. He then introduced as speaker of the evening, J. S. Mills, vice-president of the American Trust Company. Mr. Mills talked on the vocational opportunities for continuation-school students, stressing the value of preparedness in obtaining positions.

Following the address by Mr. Mills, Certificates of Attendance were awarded to the 69 students who had reached 18 years of age and who had fulfilled attendance requirements. Completion Certificates were given to students who had successfully completed the course of study in the Special Intensive commercial classes.

The number of students, in the different sections, receiving Certificates of Completion were: typewriting, 39; machine calculation, 33; shorthand, 29; business arithmetic, 15; business English, 15; office practice, 11; dictation and transcription, 11; bookkeeping, 9; journalism, 8; sewing, 13; radio theory, 5; and trade cooking, 6.

NEWS FROM FRANK WIGGINS TRADE SCHOOL

The second week of the fall semester found approximately 2,000 students registered in the day classes of the various departments of Frank Wiggins Trade School, Los Angeles. It is expected that this figure will be larger a little later as new enrollments are still being taken. A few additional courses or units are being offered in some of the departments. The drafting department is announcing a class in tool design, and in jigs and fixtures. The food-trades department this year will include, in its training program, baking technology and meat cutting. The trade school trains young men and women for employment in more than sixty different trades. A number of these, such as commercial lettering, furniture upholstering, show-card writing, sign painting, body and fender reconditioning, bricklaying, plastering, plumbing, tile setting, commercial radio operation, electric-elevator operation, soda dispensing, lunch-counter service, janitor work, machine and fancy pressing, and spotting are not common to vocational courses offered in our regular high schools.

Russell A. Black, formerly with the American Laundry Machinery Company, San Francisco, is one of the new faculty members at Frank Wiggins Trade School. Mr. Black has been assigned to the drafting department where he will teach tool design, jigs and fixtures.

Faculty Facts and Fiction is the name of the new house organ which was published last year for the first time by the faculty members at Frank Wiggins Trade School. The content includes personal news, cuts, inspirational and trade features, sports news, humor, and comic strips. The paper is circulated to about 125 faculty members and, because it is largely personal news about these folk, is not sent outside of the group. Each instructor is given the opportunity some time during the school term to serve as a reporter. It has been found valuable in drawing the faculty closer together and in maintaining a spirit of friendly cooperation which is so desirable in a large organization.

Beauty-culture work seems to be essential whether the nation is enjoying prosperity or going through a period of depression. This is evidenced by the fact that Miss Nora McNamara, in charge of the cosmetology department at Frank Wiggins Trade School, reports a placement record of almost 100 per cent for graduates during the past twelve months. Miss McNamara is a former vice-president of the C. V. F.

H. A. CAMPION.

CAREER LEAFLETS PUBLISHED

A series of guidance leaflets on careers is being published by the Office of Education. Dr. Walter J. Greenleaf, specialist in higher education, is the author. This series on college counseling and advising for the professions is designed for use of high-school and college students, orientation classes, guidance committees, counselors, teachers, and parents. The leaflets explain what the occupations are, what preliminary education is required, where professional training is offered, length of training, etc. A list of reading references is also included.

Leaflets 5 to 39 inclusive will be devoted to careers. The series now includes the following:

Leaflet No. 5—Law	Leaflet No. 12—Electrical Engineering
Leaflet No. 6—Medicine	Leaflet No. 13—Mechanical Engineering
Leaflet No. 7—Dentistry	Leaflet No. 14—Pharmacy
Leaflet No. 8—Journalism	Leaflet No. 15—Nursing
Leaflet No. 9—Librarianship	Leaflet No. 16—Forestry
Leaflet No. 10—Architecture	Leaflet No. 17—Music
Leaflet No. 11—Civil Engineering	Leaflet No. 18—Veterinary Medicine

The general price of these leaflets is five cents a copy. Quantity rates will be quoted on request. Purchases should be made through the Superintendent of Documents, Government Printing Office, Washington, D. C.

District Supervisors, Homemaking Education

Until July of 1930 the responsibilities of the Bureau of Homemaking Education have been carried by the chief of the bureau without assistance. At that date additional funds provided to the states through the Congressional Act known as the George-Reed Act made possible an increase in supervisory service. Miss Dorothy M. Shank was appointed as a district supervisor to work in connection with the Bureau of Homemaking Education, and was assigned to field service in the San Joaquin valley area with headquarters in Fresno State Teachers College for the purpose of cooperation with the college in the teacher-training program for the preparation of homemaking teachers.

The teachers of this district were thus given an opportunity to attend one of four Saturday conferences called by the Bureau of Homemaking Education during the past year. Similar service will be provided during the present school year.

Before completing graduation requirements, home-economics students at the college were taken on a tour to certain high schools selected for outstanding contributions in homemaking education. Arrangements were made to provide cadet teaching experience for college students in connection with a newly established vocational program in homemaking in one of the high schools of the district.

The vocational teacher-training program in homemaking maintained in connection with the Chico State Teachers College has also been modified to provide one day a week of professional service in home-economics education in the college in accordance with an approved yearly program of work, and four days a week for field service as a district teacher-trainer for the area comprising sixteen northern counties of the state. Miss Ruth Parker of Ventura has been selected for this work and is established with headquarters at Chico State Teachers College. This area is distinctly rural in type.

The reapportionment of Smith-Hughes funds to the states on the basis of the 1930 census has provided the first increase in these funds since 1926. This increase made possible the establishment of a district supervisor for the south coast area containing over one hundred high-school centers. Miss Georgia Ruffcorn, head of the home-economics department, Venice High School, Los Angeles, has been selected as district supervisor of this area and will have headquarters at the State Department of Education office in Los Angeles.

MAUDE I. MURCHIE.

NEW BOOKS FOR GUIDANCE

Cades, Hazel Rawson. *Jobs for Girls*. Harcourt, Brace and Company, New York, 1931. Price \$2.00.

"Jobs for Girls" is a very readable book written in a clever, breezy style. It should provide valuable reading for any girl or woman who is facing the need of selecting an occupation, or who is finding adjustment to her present job a difficult matter.

The first three chapters deal with the technique of "looking for, getting and keeping the job." The next nineteen chapters discuss nineteen different fields of work open to women today. The final chapter discusses the causes underlying the lack of adjustment of many women and girls to their jobs.

In reading the book from the standpoint of planning a course of study in "Occupations for Girls," it seemed much more valuable as a reference book than as a text. For reference work the student of occupations could find a great deal of information of a practical nature regarding any of the fields of work covered.

RUTH L. TURNER.

Kitson, Harry Dexter. *I Find My Vocation*. McGraw-Hill and Company, New York, 1931. Price, \$1.50.

A textbook for use in a high-school course on choosing a vocation is presented in this book, with the emphasis placed on teaching pupils methods of occupational analysis and self-analysis, in order that they may develop the confirmed habit of analyzing occupational problems as they arise in their lives. The features of the book include: (1) A list of occupations that is organized on a functional basis, each title being selected as descriptive of the activities of the worker; (2) Copious materials for the study of the biographies of modern Americans; (3) A concise list of principles to be chosen in studying a vocation; and (4) Carefully selected illustrations.

Some of the twenty-chapter titles are:

A Vocation for Everyone
Looking Over the Vocations
How to Study an Occupation
Making Vocational Ladders
Analyzing Yourself
Trying Out the Vocation
Preparing for the Vocation
The Lure of the White-Collar Job
Getting the First Job
The Kind of Workers Employers Want
How to Become Interested in a Vocation
The Problem of the Rural Boy and Girl
The Vocational Problems Young Women Face
The Value of an Avocation
Principles to be Followed in Choosing a Vocation

Designed to develop habits of thinking about occupational problems, the book marks a milestone in the progress of vocational guidance. It is clearly and simply written and strikes to the heart of the complex problems involved. It is organized for use in classes conducted on the conference basis, and therein lies its strength. Coordinated with the experiences of the group and with adequate occupational information, the book makes possible the crystallization of thinking habits that are all too commonly confused.

DOUGLASS SAUNDERS.

VISUAL EDUCATION

The Extension Division of the University of California recently published a catalogue which lists the motion pictures and stereopticon slides which they offer for loan during the school year 1931-32. A wide range of subjects including business and industry, various sciences, civics, history, travel, and adventure are included. Films in both the 35 and 16 millimeter size are available and a shorter list of both colored and uncolored slides.

The catalogue, entitled Visual Aids in Education, giving the list of subjects available, the rental prices, and ordering instructions may be had upon request from Department of Visual Instruction, Extension Division, University of California.

AVAILABLE PUBLICATIONS
OF THE DIVISION OF VOCATIONAL EDUCATION
OF THE UNIVERSITY OF CALIFORNIA AND OF THE
STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 17. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 2. Bulletin No. 13. Analysis of the Cabinetmaker's Trade. September, 1923. Price, 40 cents.
- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High School Students. February, 1930. Price, 25 cents.

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- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

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- No. 2. Bulletin No. 20. A Study of Vocational Conditions in the City of Fresno. November, 1926. Price, 50 cents.

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Placing Pupils Not Acceptable in Skilled Trades*

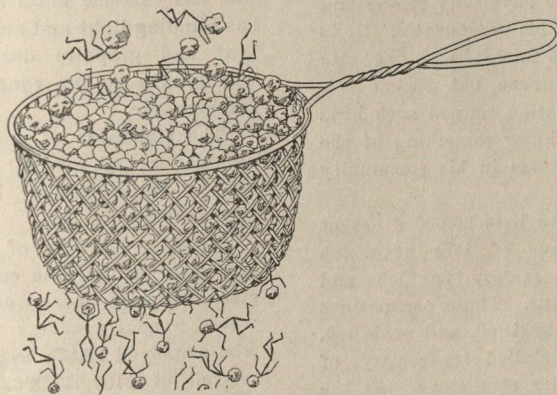
By STANLEY A. WARD
Central Trade School, Oakland

Specialized training is offered in eighteen different trades in a vocational school of the East Bay region. Under normal economic conditions, a job is available for every ordinary normal boy who completes the required training in one of these trades. It's a common thing, in fact, to receive calls for good apprentices and be unable to find enough qualified boys to fill the calls.

However, every department has some students who for various reasons cannot be trained to a recognized employment level in any of the 18 trades. Some pupils of this group have not made satisfactory adjustment during their earlier school life, and are equally maladjusted here. Some have lived under deplorable home conditions, and present nervous and mental difficulties; some have had bad health and are in a very poor physical condition. Others are so far above the average in ability and capacity that they will not associate with the trade groups, and soon drop out.

What is the responsibility of a trade teacher toward the pupils whom he sees will not be acceptable in his trade? Some instructors give them the regular trade exposure and if it does not take, consider their responsibility ended; others drop them after a brief trial, advising them to try another trade. Should a trade teacher go out of his own narrow field to help these few below-standard pupils who appear in his classes? He quite naturally asks himself, is it worth the bother and the necessary hours out of his spare time? If he tries to work with the boys who cannot be trained for his trade, is he likely to dilute his energies for his work with the boys who can profit by the training which he can give? If he does not do something for this problem group, will some other agency take hold of the boy and do it for him?

Two sample cases will illustrate:



WHAT HAPPENS TO THOSE WHO FALL THROUGH
THE SIEVE?

Case 1—The day before this boy enrolled, the director prepared the way by making it known that the boy was being promoted into high school because he was unable to profit by further instruction in grammar school, that he was a good boy from a good home, but perfectly hopeless.

The boy, nearly eighteen, was tall, well built, pleasant, polite, and very neat. Two months in the class proved that he could not profit much more in vocational education

than he could in elementary education. He would work and try but he could not acquire any degree of skill in the use of even the simplest of tools. He was not able to make a fair showing in baseball or swimming.

His father had a good position in one of the larger San Francisco stores. Two sisters, who were considerably older than he, were graduates of the University of California, and were teachers. His mother was proud of all of her children. The home was well furnished, in good taste, with plenty of

books and magazines, a piano and a radio. The boy took care of the lawn and the flowers.

After several conferences with the parents, the father placed the boy in the delivery department of one of the larger stores as a helper on a delivery truck. Now, after three years, he is still with the same firm. For over a year he has been driving and has another boy as his helper. He keeps his car just as neat and clean as he does his clothing. He likes his work and his employers and is happy. There is ample room for promotion if his development will permit it.

Case 2—This boy has been in the carpentry class for three semesters. He came to us from a junior high school at his request as well as theirs. His first and highest score by an intelligence test was .64. His clothes did not fit him; they were dirty and so was he.

His home is a rather large house in a district that was once a good residential zone but is now on the edge of the business district. It is made up almost entirely of

* Part of a term paper prepared in partial satisfaction of the requirements of a seminar in Vocational Education, Ed. 260, University of California.

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cheap rooming houses. His stepfather is perhaps only fifteen years his senior. When the boy's mother remarried, the stepfather had a fairly good job as a truck driver, but later lost it. Three older brothers and sisters, all married, live in the same house. Whenever things do not go just right, they all seem to take it out on the boy. Very regularly he is beaten and driven out of the house.

At school when things did not go right, or when he had trouble with another boy he would break down, fall in a heap and cry. It would take usually three or four hours for him to come out of such a spell. This was probably his only defense at home.

By the end of the second semester, he had begun to change. His teeth had been cleaned and filled by the school dentist, he was larger in stature so his clothes fitted him better and he was much cleaner and brighter in appearance. He was still, however, very nervous and backward.

At the start of the third semester, he entered night school, taking English for illiterates. Soon he was able to write 'cat,' 'hat,' 'bat,' and words of a similar nature. This made him one of the proudest pupils in the school. He and his father started in the firewood business together. Soon he was able to make a good job of filing a saw, a piece of work that not every mechanic can do.

He will probably be in school for another term. He learns extremely slowly but is now physically strong and quick. He is gradually conquering his nervousness. He is as honest as any boy can be and as faithful as a dog. He will make a good employee for someone, but whom?

If an instructor feels an obligation toward such boys as have been described, he must know something of the semi-skilled and unskilled occupations in his community where these boys may be placed.

The U. S. Bureau of the Census lists 20,000 different occupational designations or kinds of jobs at which people work. Many of these are factory-type jobs and the totals listed there are enormous. These occupations may be classified into skilled, semi-skilled, and unskilled. The standards of entrance to a skilled trade vary, of course, with employment and other conditions. At the present time, when there are more applicants than openings, the standards are going up. Several of our trades require high-school graduation and a minimum age of 18, and also desire a certain minimum employment level of training. Many other trades do not approach this standard. This higher standard is not only due to the efforts of unions and employers but also to the public which is requesting a better standard of service, and objecting to immature workers. Besides age, educational achievement, and usually an employment level of training, employers want apprentices who are capable of development into work which is higher than the level of their average journeyman worker. It is only through having good material to work with that they can continue in business.

The standards of entrance to unskilled or semi-skilled occupations are lower. The job may require some degree of training varying from much to little of good character, loyalty, honesty, self-reliance, industry, good judgment, skill, and ability. The one noticeable standard about this type of work is that the employer wants a

boy who can do the work satisfactorily and yet not be so far above the job that he will leave it. The boy should be of the same level as the work. Much of the work is more or less mechanical, repeating itself in rather a small cycle. It is apparent that a person who cannot get up to standards acceptable for a skilled occupation must, if he is to enter employment at all, start on a job where his standards, abilities, and capacities will be acceptable.

Mr. R. O. Beckman, in his article, "Minimum Intelligence Levels," appearing in the "Personal Journal" for December, 1930, lists some of these jobs and says that boys with mental ages of nine and ten can be taught the entire process of broom-making, outside painting, flat interior and toy painting, the higher processes of shoe repairing, vegetable, fruit, garden, farm and dairy work, mattress- and pillow-making, and detailed laundry work. Boys with mental ages of eleven and twelve can be taught to be competent janitors, stock keepers, small store keepers, greenhouse attendants, etc.

There are some kinds of work that are unpleasant or even disagreeable to some people, yet not so to others, because we know that thousands are daily engaged in these tasks and like them. Notable among these are the garbage-man who is constantly in the dirt; the laundry-marker, who handles soiled clothes; the machine-tender, who has oil and dust and monotony; the boiler-maker, who has extreme noise and iron oxide; the welder, who has blinding light and nauseating gas; the molder, who has heat and graphite dust; the pneumatic-gad operator who breaks up the concrete ahead of the ditch-digging machine, etc.

The standards of employment for thousands of jobs are elastic and are not definitely fixed, but rather are subject to bargaining between the employer and the applicant for the job.

Locally, our field of industrial employment is large. Last year in the nine counties comprising the San Francisco Bay area, there were 3,758 industrial establishments whose annual products were valued at \$1,127,926,000.00 who employed 98,038 wage-earners, who earned an annual payroll of \$139,532,000.00. This makes an average of about \$1,425.00 per wage-earning employee.

A survey of the East Bay region shows a list of firms, or groups of firms, having in their employ people who do semi-skilled and unskilled work. This list does not include, of course, the thousand or more smaller establishments employing only a few workers of this type. Some of the general groups of firms and the type of work for the sub-standard worker are as follows:

<i>Type of Establishment</i>	<i>Type of Work</i>
Apartment houses and hotels, office buildings	E, S, U
Bakeries	T, H, D, P
Box factories	M, T, U
Broom and brush companies	T
Parcel delivery companies	D, P
Wholesale and retail drug companies	D, U
Wholesale food products	All types
Retail foods	D, P, U
Can manufacturing companies	M, T
Carpet and rug cleaning	D, H
Casket factories	M, T
Auto factories	All types

Type of Establishment	Type of Work
Auto laundries	All types
Battery service	All types
Wholesale and retail hardware companies	All types
Laundries	All types
Lumber yards	All types
Manufacturing companies	All types
Cooking utensils	
Paint	
Electric equipment	
Soap	
Paper bags and boxes	
Rubber products	
Shipyards	H
Shoe repair	T
Theaters	E
Tile companies	H
Wood and coal yards	D, P

Key: Letters in column at the right indicate the following types of work:

- D—delivery service
- E—elevator and bell-hop service
- H—helpers to mechanics
- M—machine feeding or tailing off
- P—handling packages
- S—janitor and porter service
- T—machine tenders (production)
- U—miscellaneous unskilled

The problem of placing boys in occupations of the types listed is so variable and intangible that little has been written about it. It is impossible to chart a boy's marketable skills and assets and balance them to a degree that will assure success, against a chart of the requirements of a job. However, we should be more concerned with getting the boy a job where he can earn a living, grow, and be happy, than leave him unemployed because we cannot make these careful measurements.

There is no such thing as a blind-alley job; it is possible to learn something anywhere. The blindness is in staying in one occupation too long; it is in the boy, his parents, and his advisors, and not in the job. For success in life a boy must succeed in the job where he is employed. One successful job experience will help him to succeed in another. It is only by such a series of successes that he can grow. Students should expect to be able to obtain from their teachers advice and help in securing employment, and in making vocational adjustments. All former pupils should feel free to return at any time for advice or assistance. Every one engaged in vocational training should be willing to give the time necessary to carry his work to a satisfactory conclusion—that is, placement.

To place the variety of students who may appear in any trade class, teachers must establish contacts with a corresponding variety of employers. This requires unlimited time, personal knowledge of local industries and their available jobs, and a large circle of acquaintances. Moreover, pupils must be taught how to help themselves to secure employment, and a definite part of related subjects work should be a unit on how to get a job, a unit in which the instructor must be well informed.

Future Farmers Reflect Economic Conditions

The farm boy is not particularly interested in looking forward to farming as a life-long vocation, one would think, if he formed his judgment from some of the reports so commonly made today. There is no doubt that the man attempting to make his livelihood from the products of the soil today is bearing an unjust burden, both in the high taxes he pays and the low prices he receives for his crops. In spite of this handicap the son of this man in the San Joaquin Valley is interested in agriculture, and plans to make his living as a farmer also. Some of the indications which lead to this conclusion are the activities of the Future Farmers.

It is interesting to note that when school started last fall there was an increase of 11.4 per cent in the enrollment in agriculture in the thirty-five high schools teaching Smith-Hughes agriculture in the San Joaquin Valley. To substantiate the fact that this increase was permanent, the home agricultural project enrollment, according to the November reports of the teachers, shows 11.5 per cent increase over the similar report of the fall of 1930.

Many of the new boys enrolled in agriculture have found it necessary to curtail their initial investment, and in many cases the teachers are recommending that the boys, particularly those of immature experience, carry some home project that will not require a heavy financial outlay. This is in keeping with the general trend of agriculture today.

Studying an analysis of the preliminary reports for this year in comparison with last year's, it is interesting to note some rather indicative trends pointing to the fact that the student is learning to become a successful farmer. In beef production we find more boys raising beef animals, but the total number of animals is less. In bees the enrollment has remained the same, but the number of hives has doubled. The low price received for cotton this year is reflected in the boys' planting intentions, as there are one-third less registered in cotton projects this year, carrying a total of less than one-fifth of last year's acreage.

The dairy projects present an interesting situation. There was a decrease of 13 per cent in the number of boys carrying dairy calf projects, and a decrease of 17 per cent of boys having milk cows. While we find a decrease in the number of boys, we find that the average student who this year is carrying this kind of project has considerably more dairy stock than last year. This would lead us to believe that the boys in the dairy industry are slowly building up their dairy herds, and that the boys who merely take the feeding of a dairy calf as an "easy project" are dropping out. The number of boys who have field crop, grain, and hay projects remains practically the same.

An interesting program was presented in the swine raising projects last year, and the average number of pigs per student enrolled was 2.9. This year an increase of 36 per cent in the number of hog projects was shown. Not only has there been an increase in the number of boys with swine projects, but the average number of animals has increased to 3.6 per student enrolled. Although

this is rapid development in one year, it is not an uneconomical one, as the California Cooperative Crop Report for December shows that the "pig crop of 1931 is about 30 per cent larger than the fall crop of 1930, and that 51 per cent more sows were being held," and that "California still continues to ship in over 800,000 hogs from out of the state."

The poultry projects would indicate that the boys have been studying the economic situation of this industry as shown by the United States Department of Agriculture reports. The egg price index for October, 1931, was 106. With the exception of butter, which was over 100, the average for the remaining farm commodities was 62. This would tend to prove that the poultryman is receiving dollar for dollar for his efforts. The boys with laying flocks have increased the number of hens 4.5 per cent; the boys contemplating the initiation of brooding projects show an increase of over 18 per cent in quantity.

There has been a large increase in the number of boys carrying vegetable projects which would tend to prove the supposition that many boys are handicapped by lack of finances and that probably some of them are considering diversification.

R. B. DENBIGH.

Four-Year Program in Farm Mechanics

The agricultural mechanics section of the state conference of agricultural teachers last summer determined upon a four-year program of work based upon the following fundamental principles. Agricultural mechanics in order to be effective:

1. Must be given to properly selected groups.
2. Must be such as directly functions in farm work.
3. Must have instructors with actual farming experience in recent years.
4. Must provide individual instruction wherever necessary to the progress of any member of the class.
5. Must allow each individual member to progress as rapidly as his or her ability will permit. Promotion should be made at any time based on ability to do work required.
6. Must provide real jobs for effective training.
7. Must give subject matter in seasonal sequence preceding farm necessity.
8. Must provide a farm shop atmosphere and environment while the student is being trained.
9. Must give instruction and training on at least the level of the best practices of the community.
10. Must provide repetitive training in more difficult jobs to give confidence to students.
11. Must provide efficient follow-up of graduates.
12. Must make efficient use of educational procedures, methods and devices with regard to:
 - a. Character of teaching job.
 - b. Characteristics of instructional group.
 - c. Working conditions.

In accordance with these principals the following course of study was proposed with type projects appended to each year's work:

First Year

The selection, uses, and servicing of:

- | | |
|-----------------------|--------------------------------|
| A. General farm tools | E. Farm appliances |
| B. Farm shop tools | F. Simple farm repairs |
| C. Farm home tools | G. Simple farm home repairs |
| D. Farm implements | H. Simple farm home appliances |

Examples A—shovels, forks, axes, hoes, hand rakes, etc.

Examples B—saws, hammers, chisels, bits, planes, etc.

Examples C—butcher knives, screwdrivers.

Examples D—farm implement hitches, mowers, hay rakes, pruning shears, drags, plows, binders, harrows, cultivators, discs.

Examples E—saw-bucks, feeders, nests.

Examples F—glazing, hanging doors, screening, house repairs.

Examples G—similar to "F."

Examples H—wood boxes, nail boxes, ironing boards.

Second Year

Construction, service, and repair of farm buildings and equipment: septic tanks, poultry houses, milk houses, drying sheds, granaries, farm shops, farrowing pens, feeding pens, brooder houses, incinerators, brush burners, self-feeds, work benches, trailers, loading shoots, farm gates, sleds, irrigation gates, walks (concrete), and wheelbarrows.

Third Year

Operation, upkeep, and repair of power machinery: gas engines, tractors, automobiles, trucks, motors, pumps, lighting systems, heating systems, Flame or Shellane installations.

Fourth Year

Boys are to be enrolled only upon consultation and then only when the boy has a project large enough to challenge the ability of a fourth-year student who is ready to work. In order successfully to prosecute a course of this kind it will be necessary to have certain materials on hand in the shop to prevent undue delay in the completion of the jobs brought into the shop.

RICHARD J. WERNER.

Activities of Future Farmers

Activities of the Future Farmer chapters of California high schools, extending up to the close of the year, will start again early in March as preparations are being made for the annual judging competition for regional and state honors.

Three big events of the latter part of the fall were the Junior Livestock and Baby Beef show at South San Francisco, the Pacific Slope Dairy show at Oakland, and the Great Western Livestock show at Los Angeles.

The Future Farmers virtually "made" the South San Francisco show. More than 200 high school vocational agriculture students from 39 California high schools, two Utah schools and one Nevada school, displayed 667 of the 900 animals at this event. At a banquet which followed the close of this junior show, members of the vocational agriculture group were given high praise for the improvement shown in livestock displays since the beginning of the show four years ago. Nationally known judges said that the top animals would rank with the best in any eastern show.

Participation in the Pacific Slope Dairy show was curtailed somewhat this year because dairy cattle were not on display. Dairy products judging teams from 13 Future Farmer chapters competed, the Shafter team, coached by Glenn Nay, taking the sweepstakes.

Participation in the junior division of the Great Western show at Los Angeles was about double that of last year. Approximately 100 Future Farmer exhibitors displayed about 250 animals, making up practically four-fifths of the junior division.

In the public speaking contest for Future Farmer members, Frank Wattron of the Kern County high school at Bakersfield, speaking on the topic, "The Value of Livestock Projects in High School Vocational Agriculture," was awarded first place. Wattron had represented the San Joaquin Valley region. Other regional winners who competed in the state finals, in order of their placing, were James Tate, Ontario; Charles Gubser, Gilroy; David Johnston, Live Oak; George Woolsey, Redding; and Vernon Cirby, Fortuna.

Individual chapter activities, including Father and Son banquets, radio programs, school programs of various kinds, and beginning of spring projects, have occupied the time of the 6,000 Future Farmers of California high school vocational agriculture departments from the first of the year to the present.

GEORGE P. COUPER.

Problems of Business Education to Be Studied

The need for a strong central organization of teachers in the field of business education has long been recognized by leaders in this field. As a result of the need, a reorganization of the Department of Business Education of the National Education Association was effected at the meeting in Los Angeles last July, for the purpose of studying, in a united way, the problems of business education. By bringing the results of these studies to the classroom teachers it is believed that much improvement can be made in business curriculum development and in instructional methods.

Although the enrollment in business courses has greatly increased, the curriculum has not kept pace with changing business conditions. Probably this is due to the lack of adequate supervision and leadership. Because of the lack of a united organization to present its problems and accomplishments, it is felt that business education has not received the recognition from educational administrators and the lay public which it deserves. It is hoped that by a united effort some of these disadvantages may be overcome.

An advisory committee has been appointed, consisting of members from each state. A drive for membership is now being made. It is the consensus of opinion of the leaders in this field that the Department of Business Education of the National Education Association can and will assume real leadership and bring about a united body of commercial teachers.

The president of the reorganized department is Albert Bullock, director of commercial education, Los Angeles City Schools, and the secretary-treasurer is F. W. Loso, Jefferson High School, Elizabeth, New Jersey. All teachers of business subjects are strongly urged to support this movement.

IRA W. KIBBY.

London to Entertain Commercial Education Congress

The twelfth international congress on commercial education will be held at the Imperial Institute, London, during the week of July 25-29, 1932, under the auspices of the International Society for Commercial Education. The British foreign office has issued an official invitation to all foreign countries to send delegates to this congress, the invitation being extended to educational institutions and associations interested in business education.

Purpose of the Society.—The International Society for Commercial Education arranges economic courses and international congresses in different countries to provide a better understanding of the cultural, social, and economic status of the countries visited; a perspective of industrial organization is accomplished by visits to factories and industrial plants. The society also develops an understanding of the business programs for business education. It seeks to have business men and teachers work together in order to bring commercial education to a higher plane and to organize it according to the wishes of business men.

Object of Congress.—The object of the congress is to bring together men and women who are taking part or are interested in the development of commercial education throughout the world for the purpose of discussing, in the light of the knowledge gained from actual experience, the operation of fundamental principles. The congress will be concerned with business education and training of all types and grades. Not only will the problems and practices of secondary and collegiate education for business be discussed, but the training programs of companies and trade associations will also be considered.

Educational Program Planned.—The educational features of this European tour will consist of lectures on board ship; one week at the International Economic Course at Oxford University; one week at the International Congress for Commercial Education, Imperial Institute, London; lectures by outstanding men in the field of commercial education in the principal cities visited on the tour; and visits to the most important countries in Europe—England, Holland, Germany, Austria, Switzerland, and France—including trips to the capitals and major commercial centers.

Academic Credit.—Directors of the tour are being carefully chosen, and details of the educational program are so arranged that under specific conditions certain institutions will probably grant academic credit.

Further information concerning this congress may be obtained by writing to Dr. Ira W. Kibby, chief, Bureau of Business Education, State Department of Education, Sacramento.

Texts on Advertising

Two textbooks on advertising have recently been added to the approved list by the State Department of Education: Brewster and Palmer: *Introduction to Advertising*. 2d. ed. McGraw-Hill Company, 1931.

Hawley and Zahn: *Understanding Advertising*. Gregg Company, 1931.

What Is Ahead in Continuation Education*

By L. B. TRAVERS

Chief, Division of Adult and Continuation Education

Experience has indicated that for most of us there is, and probably always will be, a rather limited horizon. As we travel toward this goal, it either recedes or, in the achieving of it, new goals or horizons open before us. To many of us, life seems to be a process of striving for something just ahead rather than building for a remote future.

This principle is now being recognized in our educational theory. We have but recently outgrown the belief that education must train for the future life. Our forefathers were probably responsible for handing down this idea from the religious beliefs of their time. To them, the existing generation was hopelessly steeped in sin; no salvation for them was possible; hope lay only in the future generation. Therefore, the youth of the time should be trained away from the sins of the present toward this ideal future life. Unfortunately, in the application of this theory, it was found that no generation ever arrived at the goal of its fathers, chiefly because this goal had changed before it reached adult status. Thus we come to the commonly accepted educational theory of the day: that education must train for living successfully the life of today. Considering the complexities of present-day life, we will agree that such job alone is big enough without troubling ourselves unduly over the far-distant future. When this future approaches the present, it will be time enough to concern ourselves with its problems. In other words, educationally speaking, "sufficient unto the day is the evil thereof." The acceptance of this principle of education marks a most important step in both adult and continuation education. I am not so sure that we in continuation education are not responsible for encouraging this principle and hastening its acceptance in secondary schools.

The Pioneer Period

California has just completed the first decade of continuation education. During this period it can be assumed that we were pioneering; we were experimenting; we were laying the ground work for a successful program. This is a very common procedure in the development of any new enterprise whether it be in business, industry, or social service. We start with an aim or purpose to achieve; we borrow ideas from other enterprises of similar nature to aid us in reaching our aim; we discard those that prove of no value. In other words, we "muddle along" in a not altogether unscientific manner, building up a technique and an effective procedure for doing the job assigned to us. At the beginning, we are allowed a wide degree of freedom in choosing our own methods. This is as it should be but there comes a time when we are made to present to the stockholders in our enterprise an accounting of our activities which will indicate to them a return to society commensurate

with the investment of time, energy, and money. The ten-year period just passed is a liberal allowance for that purpose. What can we report for our stewardship?

Let us, for a moment, review briefly the happenings of the experimental period. Our continuation education law came as the result of pressure from without the state. The Smith-Hughes Vocational Education Act containing a section on continuation education was passed by Congress in 1917. It stipulated that one-third of the Federal funds provided for trade and industrial education, if spent at all, must be spent for some form of part-time education. The California Legislature of 1919 passed an enabling act accepting the provision of the Smith-Hughes Act and appropriating a state fund equal to the Federal fund available to California, for reimbursing local school districts for the salaries of teachers and coordinators of general continuation education. Partly to protect this fund and partly because of the pressure from Federal agencies, our Legislature of 1921 was induced to enact a compulsory continuation education law.

I emphasize these early events to indicate that the continuation education movement did not come from within the state. The promotion of this form of education came in advance either of enlightened public opinion advocating such schools or a personnel trained to operate or administer them.

Naturally the results were chaotic. Large numbers of public school administrators did not favor the legislation. Industrial employers could not see any beneficial effects to be expected from such short time school attendance and last, but not least, the great majority of students affected by this legislation were antagonistic to it. Is it any wonder that progress has been slow; that hardly a legislature has assembled without an attack upon continuation education?

Why is this so? What have we been doing in the past ten years that has failed to entrench us against attacks of this nature? A rather close examination of our sins of omission as well as our sins of commission, might not only enlighten us somewhat but possibly aid in the development of an institution which will function in terms of the real educational needs of employed minors.

One of the major errors made in our state was to assume that these young people unwillingly left school because of economic conditions in the home and, therefore, should not be deprived of the opportunity to carry on the usual high school program. Every study made of the real causes for school leaving indicated other grounds more important, chief of which was their dissatisfaction, for various reasons, with the high school program. Theoretically, at least, a portion of this mortality could be controlled by a modification of our practices in high school. Practically it becomes an easier task to administer this special group in a separate institution organized to meet its needs. This is no criticism of the high school or its administrators. The rapid increase in enrollment in high school has made it almost impossible to care for

* Speech delivered at meeting of the Continuation Education Association of Southern California at Mission Inn, Riverside.

other than the group which conforms to the traditional high school set-up.

The high school serves one group, the continuation school another. Continuation education in California will never prosper if it attempts to compete with the high school. Its future lies in identifying a job not now being performed by any other public institution and performing it in an efficient manner. But what is that job? It certainly includes the "processing" of this special group in such a manner that every individual is aided in adjusting himself successfully to the life activities of the community. This can be done only with due regard to the development of social and economic habits demanded by this work-a-day world.

A New Attitude

It has long been the recognized right of professional educators to determine the educational prescription for minors. This right was admitted by parents, business, trade, or professional people. During the reign of certain discarded educational theories, no one ever questioned the educator's authority in this respect. However, with a changed conception of the function of education has come a realization that those people denied any participation in determining the content of training courses have a very valuable contribution to make. Secondary schools have been slow to take advantage of these contacts. On the other hand, continuation school administrators have been forced by the nature of their job to cooperate with outside groups. A still greater use must be made of our social, trade, and business organizations. As a matter of fact, this is the biggest job before us today. A consideration of the problems of these groups will do much to eliminate the present antagonism toward our program. A community participation in the councils of the continuation school staff invariably results in a changed attitude toward its problems. From merely enduring or tolerating us, they have been known to defend and even advocate our cause.

In a sense, the continuation school is the educational clinic of the school district. To it are assigned all those unable, for one reason or another, to weather the standard school experience. Our high schools call them the unadjusted group, the educationally ill, if you consider regular school students the normal type. We must diagnose the educational conditions of each individual, prescribe for each a course of treatment and actually circumscribe the activities of each "patient" in such a way that the proper cure results. Applying the treatment may mean temporary hospitalization. Success has been achieved when the patient has demonstrated his ability to carry on, without further aid, a normal life program. That means to assume life's obligations to work and to play in daily association with others in such a manner as to be regarded as an asset to his community.

An additional reason for securing the cooperation of industry and commerce is that their establishments must be utilized in carrying on a most important part of our task. It becomes our job to organize and to regulate these activities that the rights of the employed minor are protected while, at the same time, his duties and responsibilities are definitely understood by all parties concerned. In many cases, it means the revival of the

learner's job, not the old apprenticeship with its emphasis upon serving time, but a new apprenticeship which insures to the junior worker the opportunity to acquire essential skills from the job and necessary technical and related information from the school sufficient to carry his own load at the completion of a prescribed learning period.

A Unique Task

The continuation school must take the leadership in this venture. No other agency can or will. If we fail these young people, they are thrown upon their own resources at a time when their susceptibility to unsocial influences is at its greatest, and their judgment so immature that irreparable damage can be done. It is unfortunate that the only other social agency concerned with their conduct is the juvenile court where work is of a remedial nature, while ours is of a preventive type.

Unquestionably a major factor in this problem is the personnel engaged to administer and operate the program. As was to be expected when considering the conditions surrounding the inception of continuation education in California, there was almost no one in the local communities with the required training or experience in this work to carry on this enterprise. Consequently well-meaning educators whose only experience was as subject-matter teachers which does not qualify one to administer to the educational needs of this special group, were assigned the job. What was more natural with this background than that they should offer the same sort of educational diet that had forced so many of these young people from the full-time high school. To a great extent, this condition has been remedied. The possession of a general secondary credential is not adequate evidence of fitness to work in continuation education. Neither is industrial nor commercial experience alone. While the latter is a necessary qualification, it must be combined with personal characteristics, a favorable social attitude, and a real interest in the problem of young people.

High schools have come to realize that they are being measured by the number of their failures (drop-outs) as well as their successes (graduates). The curriculum has been broadened but still California reported approximately 23,000 students under 18 years of age in attendance at continuation schools last year. Will this number increase or decrease? That, of course, depends upon a number of things, but chief among them is this:

The extent of this growth or decline is dependent on the extent to which we find the job to be performed for this "out-put" and "put-out" of the high school that is not now being performed by any other social or educational agency, and do that job in an efficient manner.

If the following questions are answered correctly, and they can be, we will be assured of an enviable position in the public school system:

What do these young people need? How will we meet this need? Who shall do this job?

In conclusion, I wish to state that the only way I know of answering these questions is through the combined thinking of all of you who have been laboring with this problem for the past decade. To provide ways and means for such group conferences constitutes the major task of the Division of Adult and Continuation Education of the State Department of Education for the current year.

CALIFORNIA VOCATIONAL NEWS NOTES

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Agricultural Education Trade and Industrial Education
Business Education Vocational Guidance
Continuation Education Homemaking Education
Civilian Vocational Rehabilitation
California Vocational Federation

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RELATED SCIENCE AID

The vocational department of the Stockton High School has recently completed a hydraulic dynamometer for use in the related science laboratories. This is a piece of laboratory equipment which, on account of its expensive nature, is usually found only in university and indus-

trial laboratories. California schools wishing to avail themselves of the opportunity of securing either castings or a completed dynamometer at cost should communicate with Mr. Floyd R. Love, director of Vocational Education, Stockton.

Vocational Guidance in the Air

The American School of the Air is again providing a series of vocational guidance programs, bringing the advice and experience of outstanding men and women of the country to boys and girls who are about to prepare for careers of their own. On successive Fridays from 5:30 to 6:00 P.M. PST, over a network of seventy-three stations of the Columbia Broadcasting System these lectures may be heard. Dr. J. C. Wright of the Federal Board for Vocational Education; Arthur M. Hyde, U. S. Secretary of Agriculture; Fannie Hurst, Dr. Julius Klein, Assistant Secretary of Commerce, and others have spoken on programs which began November 13. The last seven speakers scheduled are as follows:

- Feb. 19—Marie Sellers of Consumers Service, General Foods Corporation, on Domestic Science.
- Feb. 26—Janet M. Geister, executive secretary of the American Association of Nurses, on Nursing.
- March 4—Henry O'Malley, director of U. S. Bureau of Fisheries, on The Fishing Industry.
- March 11—Alice T. Hazeltine, on Library Work.
- March 18—William John Cooper, U. S. Commissioner of Education, on Education.
- April 8—Emil A. Hartman, director of the Fashion Academy of New York, on Costume Design.
- April 15—Dr. George K. Burgess, director of U. S. Bureau of Standards, on The Work of the Bureau of Standards.

Handbook on Continuation Education Revised

The Handbook on Continuation Education, published in 1930 by the State Department of Education, is now out of print and is being revised before being reprinted. Mr. L. B. Travers is state chairman of the committee with sub-committees in the northern and southern parts of the state. The southern committee is composed of H. O. Dyck, L. G. Stier, and John Hunt of Los Angeles; Agnes S. Wolcott and Dr. Frederick Horridge, Long Beach; E. F. Landon, San Diego; Rufus Mead, Pasadena; A. D. Stetler, Alhambra; Alice H. Davies, Glendale; C. V. Denman, Santa Barbara, and A. D. Graves, San Bernardino, with B. W. Johnson, assistant director Division of Vocational Education, University of California at Los Angeles, as chairman.

The northern committee has as its members G. C. Mann and H. N. McClellan, Berkeley; W. C. Mathews and G. P. Haller, Oakland; H. G. Hansell, San Francisco; R. F. Aspinall and Lynn E. Stockwell, Fresno; Mrs. Helen B. Shedden, Richmond; Mrs. Margaret G. Lomax and A. R. Nichols, San Jose; with Emily G. Palmer, Research and Service Center, Division of Vocational Education, University of California, as chairman.

Suggestions from teachers and others interested in continuation education will be welcomed by the committee which will be working for the next two months on the Handbook.



CALIFORNIA VOCATIONAL FEDERATION

OFFICERS

President—Morgan N. Smith, Glendale High School.
 First Vice-President, Arthur E. Paine, Huntington Park Opportunity School.
 Second Vice-President—Wayne L. Johnson, Napa High School.
 Secretary—John G. Miller, Frank Wiggins Trade School, Los Angeles.
 Treasurer—Willard H. Van Dyke, Petaluma High School.
 Editor—James A. Hull, Alameda High School.

C. V. F. Council Meets at Visalia

The administrative council of the C. V. F. held its annual meeting at Visalia on December 12 to discuss many questions pertaining to council problems, from dues to A.B. degrees. Nineteen people attended the meeting, including representatives from the State Department of Education. Meetings were held in both the morning and afternoon and at dinner.

C. V. F. Dues.—Willard Van Dyke, treasurer of the C. V. F., said that the majority of members of the federation paid their dues after the first of the year, thus innocently preventing the C. V. F. from receiving credit on the A. V. A. Roll Call on December first. He urged that all members pay these dues early in the school year. A discussion of the subject of dues brought the conclusion that local organizations should collect their own dues and that the secretary of each organization should send all A. V. A. and C. V. F. dues directly to Willard Van Dyke, Petaluma High School.

C. I. E. A. Dues.—A decision concerning the dues for the California Industrial Education Association was also reached, with Mrs. Effie J. Leatart, Polytechnic Day and Evening High School, Los Angeles, designated to receive the dues for that organization.

Annual Business Meetings.—A decision was made to hold the first annual business meeting as soon after the first of September as possible. The meeting of December 12 was to be considered the first annual business meeting of the council for this year.

Election of Sectional Presidents.—The question of the election of presidents of the geographical sections was presented by R. E. Gilbert, who said the Bay Section had elected its presidents from the vocational groups, and wanted to know if the Administrative Council recognized such election and if this president assumed a place on the council. President Morgan N. Smith stated that each section was to elect its own president through its members and that the council recognized such election. President Smith also said that the present set-up of the C. V. F. was a very great help in getting reports from the various sections through the presidents, and suggested that the presidents of the sections should exchange ideas and that a council be organized within the sections.

Evaluation of Trade Experience.—In the absence of J. R. Alltucker, chairman of the Committee on Evaluation of Trade Work in Terms of College Credits, R. E. Gilbert gave

the report, which was accepted. As the Council desired the work to be carried to a conclusion, and since it was felt unfair to ask Mr. Alltucker again to take responsibility for the chairmanship after two years of strenuous work on the Committee, Mr. Gilbert was persuaded to accept the chairmanship. The Council voted to express appreciation to Mr. Alltucker for his outstanding work, and ask him to continue to work with the Committee.

Seat on C. T. A.—President Smith said he had been appointed chairman of Convention and Institute Programs Committee of the C. T. A., and on the Salary Committee. Full reports of the work of both committees will be found in the Sierra Educational News. He was granted permission to appoint an "Institute Committee" from the C. V. F.

The plan of business for the afternoon session covered reports from geographical sections, and the appointment of new committees.

Central Section.—A. W. Miller, president of the Central Section, reported that they had held one valley meeting where a committee had been appointed to consider the question of secondary education. A second meeting was to be held on December 21 and 22 at Visalia. Mr. Miller also stated that meetings are being organized for Merced and Bakersfield.

Bay Section.—The president of the Bay Section, Ben Spaulding, said that the Council of this section would serve the C. V. F. and its own problems, too, and prepare institute programs which would include group conferences. He stated that the interests of the C. I. E. A. were represented through the large number of industrial arts, trade and industrial, agricultural, and continuation education members, each division representing its association.

C. I. E. A. Activities.—The president of the C. I. E. A. reported on the activities of the association, during the official program which it presented in Institute Week at Los Angeles. Ray Casey, the president, announced that notices calling a council meeting of this association will soon be out.

Homemaking Association.—Miss Dorothy Shank, district supervisor of home economics education, representing the State Bureau of Homemaking Education, spoke for a consideration of the needs of the home economics group in the state federation. Miss Shank was asked to carry a report of the activities of the council to the home economics association and ask them to send a representative to sit on the council.

Commercial Association.—It was also voted that the state association of commercial teachers be asked to federate with the C. V. F. and send a representative for the council.

Committees Formed.—A committee on Major Problems was formed with J. A. Woods, Santa Barbara High School, as chairman; J. A. Hull, Alameda High School; J. H. Bedford, Herbert Hoover High School, Glendale; and R. J. Casey, Abraham Lincoln Evening High School, Los Angeles, as members. The responsibilities of this committee will be centered on courses of study, safety first, etc. The committee, it is planned, will act as a clearing-house for the C. V. F.

A committee on Professional Growth, to encourage the upgrading of teachers in service, summer school and extension courses, credits, regulations, etc., was appointed, with A. W. Miller of Fresno as chairman.

To effect an actual tie-up with the C. V. F., other than in legislative matters, the A. V. A. Relations Committee was formed, with John G. Miller, Los Angeles, as chairman.

A committee on Institutes, Conventions, and Programs was appointed with Arthur E. Payne, Huntington Park, as chairman, and J. A. Woods of Santa Barbara, and F. E. Peifer of Monterey as other members.

John E. Carpenter of Sacramento was named chairman of the Legislative Committee. Other members will be named later.

The final question concerned the place of the next meeting, and Santa Barbara was chosen, with April 9 as the probable date.

Woodwork Section Meets During Institute

A most interesting and worthwhile section meeting of the Senior Wood Work Instructors was held during the Bay Section Institute on December 22. The section meeting was carried out on the conference plan. The leader, A. W. Rees, of Crockett, presented the subject, "An Adequate Record System." The following questions and statements were taken from the notes of the meeting:

1. What is an adequate system of keeping records?
2. Can we carry on production work and at the same time keep a record of instruction, training, and actual time spent by each student on the various types of jobs or machine operations?
3. Does a list of the job orders suffice for a record?
4. Of what value is a record system? The following five reasons or values were listed:
 - a. It is a basis for grading.
 - b. It increases the interest of the students.
 - c. It makes sure none of the fundamentals is left out.
 - d. It is a check on teaching.
 - e. It is good advertising. It looks good to an employer who comes into the shop.
 - f. It shows what the boy has done when an employer asks "What can Johnny Jones do?"
 - g. It serves to calm an irate parent who comes in and asks, "Why didn't my boy get a better grade?"

The objections raised were as follows:

- a. No one looks at records. What's the use?
- b. If a boy doesn't intend to follow the wood work trade it isn't necessary.
- c. It is too much work.
- d. It isn't good psychology to expose the fact that one boy is far behind others in the amount of work done.

A number of different plans with the charts that are being used in various schools were presented by members present. Many questions were asked and criticisms made. Several charts listed the various machine and hand operations, and were designed to show the cumulative record of the number of hours spent by each boy in these various machine or hand operations. A criticism of these plans was made indicating that such a record should also include the job number to show how many hours are spent on a particular job. The answer to this criticism was that such information should be kept as a separate record. The boy is

interested in the experience he gets in the various operations rather than the kind of job he has worked on.

As the discussion ended a motion was passed that a committee continue the study of this question, and present it to other groups for study, carrying it to some conclusion.

Bay Section, C. F. V. Organized

The first spring meeting of the Bay Section Council of the California Vocational Federation was held on January 11, at the Y. W. C. A. building in Oakland. This council, one of the associations which comprise the C. V. F., is taking a long step forward in federation work. Serious discussions have been held by committees working on the problems facing the C. V. F. A keen interest has been shown by each member of the council.

An outstanding happening at this first spring meeting was the admittance into the council of the representatives of the Contra Costa County Industrial Education Association, an organization formed on January 8 at Martinez, as a direct result of the expansion work of the Bay Section Council. The officers elected to this Contra Costa County association were:

President—O. V. Nichols, Alhambra Union High School, Martinez.

Vice-president—A. W. Rees, John Swett Union High School, Crockett.

Secretary-treasurer—R. R. Coudyser, Roosevelt Junior High School, Richmond.

The officers of the Bay Section, C. V. F. are:

President—A. G. Smith, San Francisco Continuation High School.

Vice-president—Samuel Hughes, Garfield Junior High School, Berkeley.

Secretary-treasurer—Earl W. Shrieber, Alameda High School.

Bay Section C. I. E. A. Meets

Organization of the Bay Section of the California Industrial Education Association was completed on February first with the following officers elected:

President—A. W. Rees, Crockett High School.

Vice-president—E. E. Kilgore, Horace Mann Junior High School, San Francisco.

Secretary-treasurer—C. H. Townsend, Oakland High School.

Soldering-Iron Project for General Shop

Once again we have a practical demonstration of the fact that interest is the keynote of learning, and that boys will respond very favorably under the right conditions. Last semester, about four weeks before the close of school a member of the freshman general shop class expressed a desire to make an electric soldering iron for his father for Christmas. A survey of the class indicated a total of fourteen boys who would like the same project. The time was short, no information was available except one blueprint, and I had never built one myself. However, there was plenty of enthusiasm and we all started to work.

Bits of pipe, copper rod, and wood began to take shape, each boy competing with his neighbor for excellence. All went well until we started the heating element, then things began to happen. One after another was designed, but would not stand up under actual working conditions. At last a solution was found to the problem just five days before the close of school, and work was feverishly started to complete the project.

We all worked morning, noon, and night. They had to be driven out at 5:30 o'clock, and they came back for more the next day. Saturday was another day for work instead of play. The final iron was completed on the last day of school and fourteen proud, happy boys paid the cost of their materials and took their finished work home.

I had many misgivings over the holidays, and very gingerly asked one of the boys, at the opening of school, how his iron worked. "Gee, it's great," was his reply. "Dad and I have soldered everything we could find."

All fourteen irons are working and in good condition. All fourteen boys are happy and all fourteen boys learned many processes of mechanical skill and tool operation. They had to be driven off the job instead of to it. Interest was the drive which kept these boys at the work until it was done; when interest is stirred no external drive is needed.

E. W. SHRIEBER.

THE SKIPPER SAYS:

During the recent visit of C. R. Allen of the Federal Board for Vocational Education in Oakland, replies to questions presented by a group one evening elicited the following statements:

The so-called science, if it applies to the occupation, should be taught on the job at the time the work is being done and by the shop instructor.

It is easier to make a good vocational teacher out of a mechanic than out of a college graduate.

In California the use of the job analysis has been overdone. Working out another job analysis of a given trade is like rediscovering America.

The student should be graded on speed and accuracy both. He will be paid on that score when he goes out on the job. The boy should be able, at least, to meet minimum standards of the job.

Those who are not settled and who are not purposefully in earnest about learning a trade should be put into industrial arts classes where their education may be centered around some project in which they do find interest. This would not be trade training. Our schools need more of the industrial arts work.

The Federal Board has suggested that the class in trade work be not larger than 15. True, some classes like radio code work can be larger, but not where individual instruction is to be given.

The most efficient size of class for training riveters in the Emergency Fleet Program was found to be six men to one instructor.

The age limit should be increased for entrance into trade work if for no other reason than that the graduates, if they are too young, cannot expect to find a job when they leave school.

There is something more needed than skill and technical knowledge. Human relations are important on a job.

Business Education Notes

News items of outstanding interest have occurred in the field of business education.

Dr. Lomax in California.—During the December institutes the California commercial teachers were delighted to have the opportunity of hearing Dr. Paul S. Lomax, in charge of teacher training for teachers of business subjects at New York University. Dr. Lomax addressed various section meetings of the California Teachers' Association, speaking on "Education and American Business," "Business Education in a Scientific Age," "Teaching Problems in Business Education."

Survey Proposed.—At the Business Section, American Vocational Association Convention, held in New York City in December, a resolution was passed favoring a comprehensive study of business education in the public schools of the United States. It is proposed to obtain the cooperation of business and the schools to make such a study.

Symposium on Business Education.—The Southern California Commercial Teachers' Association has issued a Symposium on Business Education which is highly commendable. It is made up of talks delivered at the October, 1931, meeting held in Pasadena. This booklet is a valuable aid to teachers of business subjects. The officers of this group are to be commended for this splendid work.

Sections Elect Officers.—Various sections of the California Commercial Teachers' Association elected their officers for the coming year. The sections and names of officers are as follows:

Bay Section

President—L. N. Pease, vice-principal, Stockton High School.

Los Angeles Section

President—E. S. Hilt, Adams Junior High School.

Vice-president—J. N. Given, Washington High School.

Treasurer—R. E. Bauer, Fremont High School.

Southern Section

President—Miss Vyvienne Sage, Beverly Hills High School.

First Vice-president—L. O. Culp, Fullerton High School.

Second Vice-president—M. L. Pearson, Pasadena Junior College.

Secretary—Mrs. M. L. Davidson, Beverly Hills High School.

Treasurer—Miss Alice Mulcahy, Excelsior Union High School.

Central Section

President—Leonard Sims, Selma High School.

Northern Section

President—F. J. Pribble, Sacramento High School.

IRA W. KIBBY.

Safety First

The Department of Vocational Education, Los Angeles, has issued a bulletin on safety. The manner of presenting the rules and regulations for the jobs makes it a model of style for this type of work. The department has also issued course of study sheets, both in the vocational and industrial arts fields; these, too, can well serve as models for other cities contemplating curriculum construction work.—B. E. M.

Women and Occupations*

By GRACE S. STOERMER

Assistant Vice-President, Bank of America, Los Angeles

If we are to understand the woman of today we must study her in the light of the past and gain an insight into the difficulties and problems which have been met and overcome. The old idea that woman's place was in the home has died a hard death. The question of women working is not something new. Women have always worked. The changing order of the economic and social world has again brought to woman many of the functions which were hers in early civilized ages. Then they were four in number: (1) women took care of the agricultural duties, sowing the grain, tilling the fields, and reaping the harvest; (2) they performed industrial pursuits, weaving the cloth, building the dwellings (and still we hear that it is *unnatural* for women to do this type of work); (3) they prepared the food; and (4) they nurtured the children.

Men were the warriors, the hunters, the dawning business men. Then a change came and men encroached upon women's functions and took over the agricultural work. Women retired into the home but still performed their industrial duties. Then, with the coming of the industrial age, these duties were taken away from them. Clothing was made outside the home and houses were built by skilled labor. Even the third function of women—that of taking care of the home and preparing the food—has been taken away to a certain extent. Women have had to readjust themselves to changing conditions by entering the professional and industrial world. Their progress indicates that they have no set place where they should stay. *They will always occupy the place in life where they will be of the greatest economic value.* No set of ideas, habits, or beliefs can stand the terrific pressure exerted by need.

Women and Wealth

The woman of today must have an understanding of economic principles. To many economics is a forbidding term. While women's duties were confined almost entirely to the home, economics was considered a man's subject dealing with his problems—the way in which man produces, exchanges, and distributes his wealth.

As long as men were the spenders, women were excused for being unfamiliar with the laws of spending. But with the exodus of women from the home the order has been changed and now women are the spenders and upon their shoulders rests the responsibility for 85 per cent of the buying. Statistics show that they buy or control the purchase of: 96 per cent of all drygoods; 87 per cent of all foodstuffs; 67 per cent of all automobiles; 48 per cent of all hardware; 48 per cent of all drugs; and 36 per cent of men's clothing.

A tremendous responsibility which women are sharing with the men is the accumulation of wealth which, during the last ten years, has reached startling figures.

Eighty per cent of the \$100,000,000 life insurance policies in force in the country name women as beneficiaries.

Wills recently probated in New York show that 70 per cent of men who die leave their estates to women, and 64 per cent of women who die leave their estates to other women.

In the American Telephone and Telegraph Company 51 per cent or over of the stockholders are women.

In United States Steel over 50 per cent of the stockholders are women; in the Pennsylvania Railroad, 50.48 per cent.

One hundred thirty-nine women and 123 men paid taxes on incomes over \$500,000 and 44 women and 42 men on incomes of more than \$1,000,000.

A general analysis indicates that 41 per cent of the nation's wealth is controlled by women, and that wealth is rapidly increasing through insurance and inheritance.

Women and Employment

In years to come when a survey is made of the last 75 or 100 years, a study of the change in the status of women during that period will be most interesting. A recent survey indicates that women's contribution to economic production is of so much importance that it cannot be ignored. There has been a steady increase in the percentage of women gainfully employed. It is:

14.7 per cent in 1870
16 per cent in 1880
19 per cent in 1890
20.6 per cent in 1900
25.5 per cent in 1910
24 per cent in 1920

Figures not available for 1930

The most important consequence of the war to women was the opportunity to show what they could do in new and untried occupations. They demonstrated that they were capable of serving in industries where in previous years they had made little headway. Their success in doing exacting work has permanently widened the field of women in industry; where formerly men were hired exclusively, one woman is now employed to every nine men.

Although much comment has been made on the fact that women are listed in all but 35 of the 572 occupational classifications used by the census, a careful examination of the figures shows 165 others in which very small numbers of women were found. Although there is more diversity of occupations for women now than fifty years ago they are not making any marked gain in those occupations in which they were only represented in small numbers, nor are they entering new occupations in large numbers.

Women and Education

In the field of secondary education, girls have had the same opportunities as boys for many years, and it is noteworthy that girls are in the majority in enrollment, outnumbering the boys by 174,000. In the universities and colleges in 1926 three women received a degree to every four men. In graduate schools the enrollment of women and men is three to five, but two men receive an advanced degree to one woman.

* Address delivered before the Los Angeles Soroptimist Club.

Women and the Professions

The increase of women in the professions is largely due to the increased number in teaching. In 1870, 66.3 per cent of the teachers were women; in 1925, 81.7 per cent. Although women are in the majority as teachers in elementary and secondary schools, we find that the administrative positions are still in the hands of men. Several reasons have been advanced for this situation, namely, that only within the last ten years or so has professional training in administrative work been given (this, however, has been almost equally true for men); that the tenure of office for women is considered to be shorter because of marriage; but more important still, the tradition that women are not so well suited to administrative duties as men. Time is demonstrating that these reasons are not fundamental, for women are making progress, although slowly, and it is incumbent upon them to break down these prejudices by demonstrating their fitness and acquitting themselves in such positions, not just well enough to get by, but with outstanding success.

The law.—With the beginning of the twentieth century there was less prejudice against the admission of women to schools of law, medicine, and theology than before that time. In 1902 only 153 women were enrolled in schools of law throughout the country. That was due largely to the fact that at the time only 20 states admitted women to the practice of law. It was not until 1918 that women were admitted to membership in the American Bar Association.

Although the 1920 census showed only 1,738 women practicing law, it is believed that when the 1930 figures are available they will have increased considerably. Equal opportunities and incentives must be obtained. Most men and most women, too, seem to prefer to consult a male attorney, not necessarily because they think he is better trained but because his experiences have presumably been broader.

Judge Florence Allen of the Ohio Supreme Court is the only woman in the world to sit on a court of last resort. Miss Susan Brandeis, daughter of Associate Justice Brandeis, has been admitted to practice before the United States Supreme Court; as has Miss Violette N. Andrews, a colored woman, after three years of previous practice before the Supreme Court of Illinois.

Medicine.—Elizabeth Blackwell was the first woman to receive a degree of medicine in America, and probably in the world. She received her degree at Geneva University, New York, in 1849. Every important medical school with the exception of Harvard now admits women; however, women have not made liberal use of the opportunities for medical training. One reason for this is the general discrimination against women as internes in hospital practice. There are now five hospitals staffed entirely by women, which will help to amend this difficulty.

Women and Banking

Up to 1910 there were comparatively few women officials in banks, but between 1910 and 1920 the number of women bankers and bank officials increased by more than 150 per cent, while the increase in the total number of all bank employees was 47 per cent. Conservative estimates show there are 7,000 women bankers and

brokers, nearly 4,000 of whom are listed in the Blue Book as having official positions. Of this number there are: 6 chairmen of the board, 74 presidents, 197 vice-presidents, 285 cashiers, and 2,800 assistant cashiers. Other women employees are secretaries, assistant secretaries, treasurers, assistant treasurers, trust officers, etc.

Women and Federal Positions

Women are gaining recognition in the better paid Federal positions. Miss Annabel Mathews has been appointed to the Board of Tax Appeals with a salary of \$10,000 a year. One woman started at a salary of \$4.00 a week and rose to the office of postmistress at Tampa, Florida—the fourth highest postmastership in the country. Some of the other Federal positions held by women are: collector of internal revenue at Chicago, collector of customs at Honolulu, commissioner of immigration at Boston, trade commissioners, Shanghai, Rome, and Oslo.

Women and Politics

It is only gradually that women are making progress in the political field and acquiring voting habits. There are eight women in Congress; seven states have women in the upper house and twenty-three have women in the lower. There have been many women mayors, two women governors, two women state auditors, two state treasurers, six secretaries of state. Every state has women on state boards, such as equalizer of taxes, chief insurance examiner, assistant attorney.

The political parties have given women an opportunity to affiliate with them and join their organizations, but very few have been able to secure place and power. They are increasing in numbers as delegates to national conventions and are securing appointments on their committees. Emily Newell Blair says that women do not affect results in political party organizations as men do, and until there are as many women as men in politics men will continue to affect results more than women.

Women and International Affairs

Women are concerning themselves with international affairs as they relate to the welfare of humanity. The emancipated women of the world are gradually increasing in number. There is now an International Alliance of Women for Suffrage and Equal Citizenship; and also an International Council of Women.

For the first time in the eleven years of its history the League of Nations has formed a committee of women to advise upon a matter of particular interest to women. Quoting from *Equal Rights* of May 30, 1931, "Sixteen delegates from eight leading women's international organizations will meet as a committee under the auspices of the League in the League of Nations Building on July 2, 1931, to draw up recommendations on the nationality of women. These recommendations will be submitted to the Assembly of the League of Nations at its 1931 session."

Married Women

Although restrictions exist in many industries against the employment of married women, their numbers are increasing. In 1890 only 13.9 per cent of the women wage-earners were married; in 1910, 24.7 per cent, and in 1920, 23.1 per cent. At least two million of the twenty

odd million married women in the country are working today. In many cases marriage fails to bring to women the economic security considered formerly to be one of its chief advantages. In fact, marriage may bring financial responsibilities for wife as well as for husband. Since able and deserving men cannot earn sufficient income for the needs of a family, a money contribution from the woman, as well as from the man, is a necessity.

Problems of Women Workers

While women who wish to work have had many opportunities to do so, these opportunities have not always been pleasant or desirable and there are still prejudices to be overcome. Competition is strong—not necessarily from men, but more often from other women as needy as themselves.

The question of equal pay for equal work is still far from solution, and applies to the woman in college teaching, in business, as well as to the women in industry. Women are working because they need the money, not only to support themselves, but to help support their families. In many homes the entire income is earned by wife or daughters. It is not that women lack ability, for reports of employers indicate the effectiveness of their work, or that they are less stable or skillful than men, but that they do show higher percentages of tardiness, absence, and sick benefits than do men. The general custom of paying wages on the basis of sex not only is unjust, but also complicates home problems for women.

Most employed women are at a great disadvantage, either because the needs of their families are so great that they do not dare to bargain about a job for fear of losing out altogether, or because they are too young and inexperienced to choose or bargain among the jobs available.

To secure wage equality it will be necessary to educate public opinion. It has long been the custom to look upon the labor of women as cheap labor and women must take a dignified persistent attitude in bringing to the realization of both men and women the importance of work well done without regard to the sex of the person doing it. Then equality will be close at hand, for if public opinion can be made to see the unfairness of certain actions through free and frank discussion, we can depend on the wrong being righted, possibly not immediately, but eventually.

Some of the data collected on women's share in family support indicate that sons do not assume equal responsibility with daughters toward the parental home. It may be considered common knowledge that sons do not forego marriage and careers to anything like the extent that daughters remain at home because of the needs of parents or younger sisters and brothers.

All these facts show that women have not received their full status as individuals, but that they are becoming more and more conscious of their opportunities in a world in which they must share the responsibility for the solution of problems, social, economic, political, and occupational.

A California Coordinator in King George's Land*

By SARAH B. CROSBY

In England are several types of continuation schools. Because the Fisher Act is permissive, considerable latitude is allowed in the development of schools for young workers.

London has a number of voluntary day continuation schools conducted by the London County Council. In Liverpool one of the most interesting types of continuation schools is found in the "instruction centres" organized to provide instruction for unemployed young people. These instruction centres, under the provision of the Education Act, 1921, and the Unemployment Insurance Act of 1923, are organized under the auspices of the office of the Director of Education and the Ministry of Labour. All unemployed minors who are otherwise eligible for unemployment insurance benefits must attend these centres if they wish to receive their insurance benefits. A third type of continuation school is the "works" school which is organized and conducted partly or wholly by an employer or group of employers who have on their payroll a number of junior employees.

A certain amount of over-lapping is found in these three types of continuation schools. In London, some of the County Council's day continuation schools partly fulfill the function of instruction centres for unemployed minors—a type of continuation education which in certain other

localities is organized under the Ministry of Labour. Then again, in Birmingham, the famous Bournville Day Continuation School that is conducted largely for the junior employees of Cadbury Brothers, Limited, and is housed in an up-to-date school building on the Cadbury grounds, is staffed with teachers provided by the Local Education Authority of Birmingham.

In London, in the fall of 1930, the London County Council conducted at least a dozen day continuation schools. These schools are located in the various parts of London where they will serve the best interests of a particular group of young workers or prospective workers.

The general objective and scope of work of these day continuation schools in London is clearly described in the foreword of the prospectus (or catalogue) of each of the schools. The foreword of the Brixton Day Continuation School outlines its objective and scope of work as follows:

"The aim of the school is to meet the needs of the following groups of young people between the ages of 14 and 18:

(1) Those who are leaving or have left school and who wish to continue their education in general subjects or who wish for specialized instruction in preparation for commercial or industrial life.

(2) Those who have obtained employment and whose employers can arrange for them to continue their education for at least two half days each week.

* Miss Crosby, now with the Junior Employment Service of New York State, was coordinator in the San Diego Continuation School, a position which she resigned to spend a year in travel in England and study in New York City.

(3) Those who have left school and who are awaiting the first opportunity to obtain work. The principal is always willing to assist such students to obtain work as soon as possible.

(4) Young people between the ages of 16 and 18 who need intensive courses of training to fit them for specific employment.

"Courses of instruction are provided in commercial, technical, and general subjects. Instruction may be obtained in a foreign language, provided students pass an English test.

"Special courses of instruction are arranged for post-office messengers, and for those desirous of taking civil service, the Royal air force, and other examinations held by recognized public bodies.

"A special course of instruction is held in conjunction with the United Dairies (London), Ltd. Students who are accepted for training and who satisfactorily complete the course are offered employment as saleswomen or bookkeepers in the United Dairy Company's shops and offices."

Concerning placement work the Brixton Day Continuation School prospectus states:

"The school is in close touch and cooperation with the local employment exchanges. There is also a growing tendency among employers to apply directly to the school when there is a vacancy on their staff to be filled. The principal has, therefore, been able to compile a list of employers to whom application can be made, when desirous of placing a suitable student."

The following items listed under "Items of Interest" in the Brixton Day Continuation School prospectus indicate the social and extra-curricular activities of the students:

"Visits to places of educational interest are made during each year. Visits are arranged to museums, art galleries, exhibitions, theaters, and other places of educational interest. During the vacations, tours are arranged. Visits to the following places have been made during the past vacations: Edinburgh, South Wales, Paris, Southampton, Portsmouth, Oxford, Isle of Wight, etc. . . .

"Among the special school functions held annually are the Christmas reunion dance, the distribution of certificates, the sports meeting, the garden party, and the musical festival. . . .

"A school magazine produced by the students under the editorship of a member of the staff is issued each term. . . .

"Social clubs have been established for past and present students. Meetings of the various sections—net ball, dramatics, camera, hobbies and nature study, are held regularly. Socials are held monthly. . . .

"The football and cricket clubs meet according to season, on Saturday afternoons. The net ball club meets every Saturday afternoon for games, and during the week for practice."

The Brixton Day Continuation School is located in a large, handsome building near Water Lane at Brixton Hill. Ornamental iron gates are at the entrance to the grounds. The latter are made extremely attractive by trees, shrubs and flowers. In the back yard of the school there is a spacious lawn bordered by some fine old mulberry trees which were planted by the Huguenot refugees in the time of Queen Elizabeth. Water Lane,

where the tram from London stops, was once the waterway through which Queen Elizabeth's barge used to pass on its way to London from Lambeth Palace. And it was near this spot that the famous incident of Sir Walter Raleigh and the cloak was supposed to have occurred.

In this school one felt the atmosphere of real "continued" education. Here, by fitting each boy and girl for a job and placing them on that job, the school seemed to bridge successfully that gap between the educational background acquired in full-time school and the demands of adult life. Nor in this process were cultural and social values ever neglected.

Enrollment at the London day continuation schools is limited to young people between the ages of 14 and 18. The minimum amount of attendance for those who desire to enroll is 6 hours a week and the maximum attendance is 15 hours. Students are encouraged to enroll for the maximum number of hours.

Liverpool has provided continuation education for unemployed minors through Junior Instruction Centres. One of these centres offers training in commercial work, two provide training along industrial lines, and the fourth offers domestic training for girls. The centre devoted to commercial work is for both boys and girls, and offers classes in shorthand, typing, bookkeeping, English, and office routine. A singing lesson and a weekly debate are also included in the school's program. From 60 to 80 boys attend the Centre every morning, and approximately the same number of girls attend each afternoon.

The two Instruction Centres providing industrial training are for boys only. The larger one is the Belmont Road Technical School, and the other is the Oldham Street Centre for Boys, located on Renshaw Street. At these two centres woodwork, bookbinding, English accounts (compositions, letters, etc.), and various other handicraft subjects are taught. The fourth centre—the Walton Road Educational Centre (for girls)—teaches cooking, laundry, valeting, dressmaking, wool and raffia work, housewifery, singing, English, and citizenship. In addition, the school, which is located in a well-planned modern building, puts on a physical-education program which includes the use of a swimming pool in the basement of the building.

The persons in charge of these Instruction Centres cooperate closely with the officers of the Juvenile Employment Bureau. The school principals are notified concerning vacancies and either send the boy or girl direct to the employer or to the Employment Bureau to receive further information about the vacancy. An officer of the bureau periodically visits the Centres for reports concerning the student's progress, capability, and character.

In regard to the placement work of the Juvenile Employment Bureau, the annual report of the Juvenile Employment Committee of Liverpool for the year ending July 31, 1930, gives the number of vacancies reported to the Bureau by employers as 10,738. "Of these 9,169 were filled, 4,032 by boys and 5,137 by girls, compared with 7,010 (3,207 boys and 3,803 girls) filled during the previous year." The report continues: "These figures represent 2,159 more vacancies filled by the Bureau candidates than in any previous year, in the face of less favorable conditions prevailing in industry."

One of the most interesting English "works" schools is the Staff Training College of Lever Brothers, Ltd., at Port Sunlight. Here, in an artistically designed building on the factory grounds, surrounded by lawns and trees, the Staff Training College is located. The College provides, in addition to facilities for social activities, "educational classes for all junior employees 14-16 years of age" in the factory, and for "junior employees 14-18 years of age in the offices," and for "apprentices to skilled trades during their term of apprenticeship." Classes are held during working hours and without deduction from wages.

During the fall term of 1930, 38 boys and 76 girls from the factory (unskilled group) attended the Staff College. There were about 75 apprenticed boys attending the College. All of the latter group attend evening school—the Birkenhead Technical School, or some other similar institution connected with the Local Education Authority. These boys attend the college classes on Saturday morning from 8:30 to 12:30. There are no girls in this group; there are, however, 55 girls from the office, as well as nine boys, who attend the college. The junior employees 14-16 attend the college two hours a day two days a week.

The subjects on the course of study for the junior employees (14-16 years of age) include arithmetic, English, drawing, hygiene, and physical training. The older group of junior employees (16-18 years of age) study bookkeeping, commerce, shorthand, economics, English, arithmetic, and physical training.

In addition to the educational work carried on at the Staff Training College, Lever Brothers also offer prizes and awards for employees who are studying at schools and colleges other than the Staff Training College. The company's leaflet on "Prizes and Awards for Continuation and Higher Education" contains the following announcement to employees:

"The Governor, Chairman, and Directors desire to call the attention of all their workers again, to the necessity for, and advantages of, continued mental training. . . .

"In order to encourage the members of the staff and all employees in the factory and offices at Port Sunlight, in the offices at Lever House, in the Liverpool offices, or in any branch office, to continue their education on broad lines, the company offers to refund the education fees to all students taking courses of study, directed by local education authorities, who make 85 per cent of the possible attendances at their classes and sit for the usual examinations. . . .

In addition to the payment of class fees, the company also offers a special scheme of prizes to be awarded according to results in examinations held by:

1. The University of London and provincial universities.
2. The Institute of Chemistry.
3. The institutions of civil engineers, mechanical engineers, and electrical engineers.
4. The Chartered Institute of Secretaries.
5. London Association of Accountants.
6. The Institute of Costs and Works Accounts.
7. The Royal Society of Arts.
8. The London Chamber of Commerce.
9. The London City, guilds, and other public examining bodies of similar standards.

"All prizes (ranging in varying amounts up to £10) will be awarded in books (text books), or in payment of fees in connection with further education, or by arrangement with the company toward the expenses of a continental holiday."

The most striking characteristic of the English continuation schools was the students' eagerness for education. Whether the subject taught or the topic discussed pertained to their vocational or avocational interests, the students showed a marked interest. And equally striking was the attitude of the teachers toward their students. Whether the schools were in the old and somewhat dingy buildings of the East London Day Continuation School at Bethnal Green and Bow Road, or in the beautiful new buildings at Bournville, the teachers showed marked enthusiasm in helping each of their students work out the problems of adjustment to adult life.

District Supervisors of Homemaking Education

The supervision force in home economics in connection with the Bureau of Homemaking Education of the State Department of Education has been increased by the addition of two members, recently appointed.

Miss Ruth A. Talbot, for the past five years state supervisor of home economics for the state of Nevada, has been assigned to the five southern counties of California with headquarters in the city of San Diego.

Miss Rua Van Horn, formerly teacher-trainer and state supervisor of the state of Montana, has been assigned as local supervisor of home economics for the city of Oakland, and began her duties on January 1. This position is a cooperative one maintained by the city of Oakland and the Bureau of Homemaking Education for the promotion and development of federal and state-aided programs in home economics for junior and senior high schools and adult and general continuation groups in homemaking including child development.

This expansion in the supervision force has been made possible because of moneys obtained through the congressional act known as the George-Reed Act.

MAUDE I. MURCHIE.

Continuation Education in Line for Fair

The exhibit of continuation schools for the 1932 State Fair is being planned as a unit to illustrate three functions of these schools: guidance, training, and placement. Prizes are being offered in these three lines and it is hoped that the schools will contribute projects to cooperate in making a fine display which will interpret the work of these schools to the public.

The committee appointed by State Superintendent Kersey to serve on the State Fair committee are: Mrs. Katharine S. Cox of San Diego; Virginia R. Hubener, San Francisco; Mrs. Margaret G. Lomax, San Jose; W. C. Mathews, Oakland; H. N. McClellan, Berkeley; A. E. Paine, Huntington Park; Mrs. Grace Palmer, Ontario; J. I. Wallace, Sacramento; F. C. Weber, Los Angeles; Agnes S. Wolcott, Long Beach; and Emily G. Palmer, University of California, chairman.

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Looking at the Facts for Homemaking

By RUA VAN HORN

Local Supervisor of Vocational Homemaking, Oakland, California



The organization of the homemaking course in the continuation school was not satisfactory to the students, the staff, or the administrative officers of the school. All agreed that changes should be made, but the pressure of each day's program had made more than minor changes an impossible undertaking. Varying opinions prevailed concerning desirable readjustments but it was agreed that as much objective information as possible should be secured to become the basis for recommended changes.

Consequently four studies were planned, and carried out.

The first was a study of attendance for the period between August 10, 1931, and February 15, 1932, to determine the me-

median number of days spent at school by the girls in the twenty-hour, and the four-hour-a-week majors. This was found to be twenty-five and two-thirds days out of a possible one hundred and eighteen days for the twenty-hour a-week majors, and thirteen and a half days out of a total of twenty-six for the four-hour-a-week group. It is interesting to note in the recently issued bulletin of the Department of Education, "Continuation Education in California 1930-31," Bulletin No. 6, that the average attendance for all continuation pupils in the state is 4.03 hours a week or, in other words, slightly more than one day a week. The constant entering and leaving for part-time employment, together with leaving due to age exemption, makes the attendance of continuation pupils particularly pertinent because of the increased necessity for meeting each individual's need when he is present.

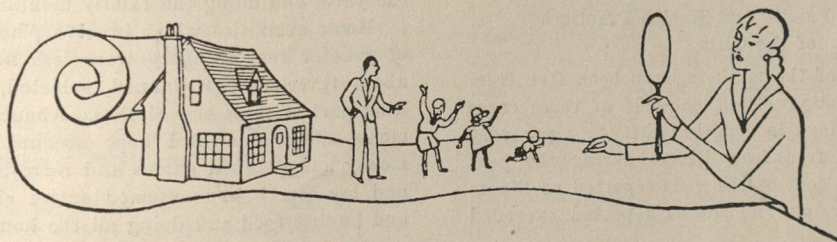
The second study was of intelligence. The summary of the available records of the intelligence quotients of girls in the school indicated the median I Q to be 79, with 116 as the highest and 53 as the lowest of the 222 records on file.

The third study was of the reading and mathematics scores to determine the performance ability so that teachers might have a guide when preparing and present-

ing lesson materials. The age standard for both reading and mathematics was found to be eleven years. The approximate grade standard was 4.3.

The fourth study was of home conditions and personal factors. A questionnaire was used in an attempt to learn as much as possible about: (1) the home conditions, (2) the health of the family, and health practices of the girls, (3) the home responsibilities, (4) the interests, and (5) the ways in which the pupils had earned or secured

spending money. It was hoped that this questionnaire would present problems not already recognized and would give a better picture of the group than could be secured in any



way other than through extensive home visiting.

The questionnaire was given by a comparative stranger to the groups. The same introductory talk explaining the general purpose of the questionnaire was given before the papers were distributed. It was emphasized that the identity of individuals was not wanted and it was requested that each person conceal his work from others in the class.

It seemed improbable that there should be sufficiently significant differences between the twenty-hour and the four-hour-a-week groups to warrant two programs, since the groups are constantly interchanging, but the questionnaires were tabulated separately so that the results might be compared. The following condensed summary presents some of the findings of the questionnaire.

Home Conditions

Three-fourths of the 176 girls have mothers who do not work outside of the home. The occupations of the fathers represent a broad sampling of unskilled or semi-skilled types of work, with no dominant kind indicated. Slightly more than half, or 54 per cent, live in houses owned by the family and the slightly more than one-third of the group who rent also live in houses. The

majority of the houses, owned or rented, have five or six rooms which house five or six persons. About three-fourths of the homes have no paying roomers. Only 57 per cent of the group live with both of their own parents. Fifteen per cent live with only their own father or own mother, while 12 per cent live with one of their own parents and a step-parent. Five per cent of the group take the place of the mother in the home. One-fourth are the oldest child, slightly over a fourth are the youngest, and nearly half are in-between children.

Practically one-half of the girls sleep with one other person and a small number sleep with two or three other people in the same bed. More than two-thirds sleep in rooms with additional people in the same room.

In spite of sanitary regulations, nine per cent of the homes do not have a sink with running water, and seven per cent do not have a bathroom. Electric irons, and radios are listed most frequently as equipment in the home, while only one-fourth have carpet sweepers and less than one-third have vacuum cleaners.

One-half of the homes subscribe to one or more papers or magazines and nearly one-half of the girls, or 49 per cent, have library cards available for use. Fifty-eight magazines were listed as those liked best. "True Story" was listed 74 times, "Love Story" 48, "Movie Magazine" 12, "Ladies Home Journal" 10, and the rest from nine to one.

Health of the Family and Health Practices of the Girls

Only 39 per cent of the mothers have been free from illness during the past year, but one-half of these cases did not exceed ten days in length. Fifty-two per cent of the fathers were free from illness during the past year. Thirty-five per cent of the girls reported no illness during the past year, and no illness reported exceeded ten days in length.

A little more than half of the group have helped to care for sick people during the year, while more than three-fourths have not helped care for a person hurt in an accident.

About one-fourth of the group go to bed between 8:00 and 9:00 p.m., over a third between 9:00 and 10:00 p.m., and a fourth between 10:00 and 11:00 p.m. One-third are allowed to stay up two nights a week later than the usual bed-time. One-half arise between 6:00 and 7:00 a.m., and more than one-fourth between 7:00 and 8:00 a.m. More than half have a weekly shampoo. Slightly more than half bathe twice a week, and more than one-fourth bathe three or more times. Seventy-three per cent report that they brush their teeth every day. About one-fourth do not eat between meals or before going to bed. Three meals a day is the practice of more than three-fourths of the group, but a little less than two-thirds eat the same number of meals each day or have meals served at the same meal hour.

Coffee is used at least once daily by about three-fourths of the group, tea by about one-third, while almost half, or 47 per cent, do not drink milk. Potatoes, lettuce, carrots, and beans were eaten by at least two-thirds of the group during the preceding week, while only one-half used tomatoes, and slightly less than one-half used cabbage

or spinach, both of which rank ahead of lettuce in nutritive value and low cost. Oranges and apples were used by more than three-fourths of the number, bananas by half, and prunes by less than one-third. It is encouraging to note that practically 90 per cent used eggs, and 66 per cent fish. More use pork than beef or lamb, while chicken occurred in only 40 per cent of the cases. Hot breads were the most frequently checked cereal products, reaching 58 per cent, and the item of next highest frequency, in this class, was oatmeal, amounting to 22 per cent.

Activities and Responsibilities of the Girls

Over 90 per cent are responsible for the daily and weekly care of their rooms, washing of their stockings and underwear, ironing and pressing of their clothes. The ten other home activities most frequently performed during the previous week were, in rank of frequency: setting of table, clearing of table, washing and drying of dishes, sweeping of floor, arranging of articles on dresser or piano, going on errands for mother, cleaning of bathrooms, emptying of garbage, sweeping of rugs, and dusting of furniture.

Other household tasks performed during the past year were, in order of frequency: ironing, fancy work, window washing, making some of their clothes, helping with family washing, cleaning of walls, helping sew for someone else, doing the family washing alone, helping clean the yard, and doing the family mending.

Home activities which involve planning and assuming of greater responsibility were less numerous. However, about three-fourths planned, selected, and purchased at least part of their new clothes. About two-thirds planned meals, about one-third kept account of their spending money and planned games and refreshments for a party, and one-fourth had assumed entire charge for planning and buying food and doing all the housework for at least one week.

In the care of children, 55 per cent played with children, and nearly half had fed, dressed, and washed or bathed a child. Only a little more than one-fourth were responsible for washing children's clothing.

Sources of Money

Helping with housework was the way in which a little more than half of the group earned money. One-third had cared for children during the afternoon, did weekly cleaning, did washing and ironing, cared for children during the evening or did kitchen work after a dinner party. About one-fourth ironed table linen, or received pay for work done at home.

The four-hour-a-week group listed forty-eight other ways by which they had earned money and the twenty-hour-a-week group listed twenty-seven other ways than those mentioned above.

Perhaps the only noticeable difference between the two groups was in the source of spending money. Of the four-hour-a-week group 39 per cent earn it, 28 per cent ask their parents for it, and 11 per cent do not have any, while in the twenty-hour-a-week group 53 per cent ask their parents for it, 15 per cent earn it, and nine per cent do not have any. Six per cent of both groups have a regular allowance from parents.

Interests

One question asked for the three things most often wished for. As would naturally be expected this is a long and varied list. A desire for work comes first, with about one-third of the entire group wishing for it. A wish for clothing is the next item most often given, with travel, a desire to be married, money, and a desire for friends (usually boy friends) coming next in frequency. There were also frequent wishes that father or some other member of the family might get work, for a car, a vacation, a mother, or that the family might be together.

When asked what they wished to do upon leaving school nearly two-thirds said they hoped to secure a job; and 16 per cent hoped to be married. Two-thirds wished help in matters of personal or social development as ways to become successful and popular, what to look for when choosing girl or boy friends, and manners between boys and girls. More than half of the group want help in knowing how to tell their troubles to their mothers, avoiding family quarrels, and ways in which the family may have good times together. Eighty-five per cent said that they were interested in using school time to learn more about some way in which to earn their living.

After a series of staff meetings and conferences, ten facts were accepted as those which seemed to be of outstanding significance in determining the reorganization of the homemaking work.

1. The majority of the students are of less than average mental ability as measured by the intelligence quotient. It is believed, however, that these two statements should be kept in mind:

"Students have at least four dimensions: linguistic longitude, manual latitude, physical altitude, and stick-to-it-iveness. The present intelligence tests measure only the first dimension."*

"It is impossible to obtain any measure for the sum total of habit formation, dispositions, attitudes, and tendencies, nor can any satisfactory representation of the integrated personality of an individual be procured through tests. Yet it is universally accepted that personality in all its phases is of as much, if not greater importance, than is the intelligence level of an individual."**

2. There is a very short period of attendance for the majority of the pupils. Therefore the work must be organized to present the basic essentials in a short period of time.

3. The students have interests normal to girls of this age.

4. Several of the group are already married and a good number of the group expressed a frank desire for marriage as soon as they can leave school. This indicates that the need for minimum essentials and basic standards in homemaking is immediate.

5. The majority of the group have demonstrated, as well as indicated through the questionnaire, that there is ability to do manipulative activities that are not too complex, when there is a real interest and incentive.

6. The health practices and standards of living are below the optimum for most effective living in a good many cases.

* Butterfield, E. W. School-dull and life-bright. In *Journal of the National Education Association*, April, 1931.

** Burr, E. T., and Unger, E. W. Minimum mental age levels of accomplishment. *University of the State of New York*, 1931.

7. Wage earning of those who have worked has been largely in homemaking or closely related fields, so that it would seem that training in homemaking and wage earning can be closely related.

8. There is no significant differences between the four-hour and the twenty-hour-a-week groups. The same course meets the needs of both groups, but for attendance purposes they should be kept in separate classes as at present.

9. Wage earning is already a responsibility of a good many in the group and work is desired by many more as soon as they leave school. It would therefore seem that the work must have a wage earning as well as a basic homemaking objective.

10. Irregular attendance and entering and leaving school throughout the year necessitates an organization and plan of instruction that will take the pupil where he is and carry him as far as he can go toward social usefulness.

The next step in the reorganization of the course in homemaking for this group is perfecting an organization and preparing teaching materials that will meet these needs.

Homemaking Classes Train Indian Girls

Girls in Indian schools are taught more home economics than those in white schools, says Miss Carrie A. Lyford, one of the three field supervisors of home economics for the Bureau of Indian Affairs who are responsible for carrying the message to all the "Laughing Waters" between Maine and Mexico. Miss Lyford was appointed three years ago. Her territory covers the middle north-west—the Dakotas, Wyoming, Montana, Minnesota, Wisconsin, and Michigan.

Fifty-nine Indian government schools throughout the country, she says, maintain home economics courses with classes scheduled for all girls from the fifth grade to the twelfth. In twelve senior, non-reservation high schools, intensive courses in home economics are offered in an endeavor to prepare the girls for remunerative work after they finish. Home-economics teachers in the Indian Service must be college trained. Salaries are sufficiently high to attract well prepared instructors.

The idea of the Indian Service is to prepare the Indian girl to work out the problems which actually will confront her in making a home in the modern world. To this end attractive home economics cottages have been set up to serve as laboratories, with a home setting as a means of making the courses offered more realistic. There are about fifty of these cottages now in use. They become real social centers and the girls take great pride in keeping them attractive. Housewifery and home management classes are carried on to special advantage in the cottage. Unit kitchen equipment makes possible the preparation of food for a group of family size, and throughout the course special emphasis is given to the service of food as it should be carried on in a well-conducted home.

—News Release, Department of the Interior.

A Study of Arithmetic Used by Office Workers

By IRA W. KIBBY

Chief, Bureau of Business Education, State Department of Education

Arithmetic used by office workers has been made the subject of study by a committee working in cooperation with the Bureau of Business Education. Over 400 office workers were personally interviewed and answers to certain definite questions were obtained. In order to have the replies influenced as little as possible by what had been learned on the job, workers who had not been out of school over five years were selected. Each worker was asked certain specific questions by the interviewer, and just as accurate a picture of the situation was obtained as possible. The following table gives the results of the interviews:

Questions	1	2	3	4
1. How much addition do you use?				
a. Mental	135	101	79	83
b. Written	105	108	80	105
c. Machine	142	40	43	173
d. Tables	20	9	30	339
2. How much multiplication do you use?				
a. Mental	88	89	105	116
b. Written	80	89	80	149
c. Machine	40	27	39	292
d. Tables	18	15	23	341
3. How much subtraction do you use?				
a. Mental	108	83	109	98
b. Written	85	96	91	126
c. Machine	46	30	35	287
d. Tables	6	6	11	375
4. How much division do you use?				
a. Mental	38	63	115	182
b. Written	47	67	96	188
c. Machine	20	11	27	340
d. Tables	4	4	19	371
5. To what extent do you use:				
Fractions	43	53	104	198
Graphs	5	15	23	355
Decimals other than in money computations	32	31	38	294
Square Root	3	3	6	386
Cube Root	3	0	4	391
6. To what extent do you compute?				
Interest—				
a. Mental	14	29	53	302
b. Written	29	42	57	270
c. Machine	13	3	16	366
d. Tables	19	9	15	355
Discount—				
a. Mental	36	41	39	282
b. Written	47	59	46	246
c. Machine	11	6	19	362
d. Tables	7	4	14	373
Insurance	14	7	24	353
Commission and brokerage	18	8	19	353
Taxes	1	4	6	387
7. Do you have to change decimals to common fractions?.....	10	19	57	312
8. Do you have to express decimals as fractions?.....	10	20	55	313
9. To what extent do you use the application of aliquot parts?	10	16	41	331

LEGEND:

Columns 1—*Very frequently*

2—*Frequently*

3—*Seldom*

4—*Not at all*

The significant facts brought out by the study were:

1. Written and mental computing is still an important part of the work of many workers in business occupations.
2. A surprisingly large number of workers in business occupations do not use arithmetic at all, or use it very little.
3. Addition is used more extensively than other types of computing.
4. Additions are computed more by the use of machines than mentally or with pad and pencil.
5. Subtractions, multiplications, and divisions are computed more mentally or by the use of a pad and pencil than by machines.
6. More additions, subtractions, and multiplications are computed mentally than by the use of pad and paper or by machine.
7. Only 25 per cent of the workers used fractions frequently or very frequently.
8. Only 11 per cent of the workers had to compute insurance or brokerage problems.
9. Only 11 per cent of the workers used graphs.
10. Less than 3 per cent of the workers had to figure tax problems.
11. Only about $\frac{1}{3}$ of the workers used decimals other than in money computations.
12. Less than $\frac{1}{3}$ of the workers had to compute interest.
13. A little more than $\frac{1}{3}$ had to compute discounts.
14. Of the $\frac{1}{3}$ who had to compute interest only a few used tables.

The committee found that the problems to be figured were of a comparatively simple nature and required no great reasoning skill. Any given business house might have problems peculiar to itself; however, an individual with a thorough knowledge of the fundamentals had little difficulty to solve the problems when he became familiar with the business concerned.

Summer Session Courses in Business Education for 1932

University of California, Berkeley:

Commercial law

Industrial and commercial history of Europe

Principles of accounting

Demonstration and methods of teaching typewriting

Demonstration and methods of teaching shorthand

University of California, Los Angeles:

Principles of accounting

Current problems in commercial education

Demonstration and methods of teaching typewriting

University of Southern California, Los Angeles:

Elementary accounting
Curriculum and methods in accounting
Business statistics
Principles of merchandising
Curriculum and methods in merchandising subjects
Evolution of marketing institutions
Business education in secondary schools
Problems in business education
Curriculum and methods in junior business training
Curriculum and methods in typewriting
Curriculum construction in business education
Seminar in business education

San Jose State Teachers College:

Beginning typewriting

Armstrong's College of Business Administration, Berkeley:

Accounting—beginning, intermediate, advanced
Business management—advertising, salesmanship, marketing, personnel administration, retail salesmanship, merchandising, department store organization and management
Economics—money and banking
Methods in typing
Methods in shorthand theory
Methods in shorthand speed
Methods in bookkeeping, accounting
Methods and materials in business English
Methods and materials in business practice
Methods and materials in junior business training
Administration of commercial education
Shorthand—beginning, intermediate, advanced
Typing—beginning, intermediate and advanced.

Commercial Texts Approved

Commercial textbooks which have recently been listed for use in California high schools are:

Broaker: Visual method for practical training in double entry bookkeeping. Certified Publishing Company, 1929.

Set 1—Bookkeeping for beginners.

Set 2—Junior accountancy and advanced study.

Burgess, Lyons, and Cox: The new Burgess' commercial law. Lyons and Carnahan Company, 1931.

Fernald: Salesmanship. Prentice Hall Company, 1926.

Le Deuc, Morton, and Gordon: Hadley's pathfinder course in bookkeeping and business control. C. R. Hadley Company, 1929.

Part I—Bookkeeping and business control.

Part II—Constructive accountancy.

Each Part consists of lessons, exercises, solutions and practice set instructions which may be purchased separately.

McKinsey: Bookkeeping and accounting. South-Western Publishing Company, 1931. Vol. 1, Series B.

Morrill, Bessey and Walsh: Applied office practice. Heath Company, 1931.

Shaaber: The art of writing business letters. Houghton, Mifflin Company, 1931.

So Relle and Smith: Gregg typing, techniques, and projects: complete course. Gregg Publishing Company, 1931.

So Relle and Smith: Gregg typing, techniques, and projects. Book II. Gregg Publishing Company, 1931.

Guidance for the Physically Handicapped

By H. D. HICKER

Chief, Bureau of Vocational Rehabilitation

Counselors cannot be experts or even experienced in every field, nor are they expected to be. The competent counselor will always endeavor to supplement his personal knowledge by reference to specialists if available. Applying this general principle to a specific field, the school counselor who has made no study of the needs and vocational capacities of the physically handicapped may well call in for consultation on such cases staff members of the Bureau of Vocational Rehabilitation, State Department of Education, who are qualified by daily experience to advise in this special field.

A recent incident which occurred in one of our high schools will show some of the possibilities involved. J. M. Dodd, supervisor of the San Francisco office of the Bureau of Vocational Rehabilitation, interviewed the city superintendent and the principal of the school referred to, concerning a possible plan of local participation in the state's rehabilitation program. These officials felt that their school counseling service was adequate, but agreed to Mr. Dodd's suggestion that he look into the situation.

Among the handicapped pupils interviewed, Mr. Dodd found one nineteen-year-old boy, crippled as the result of infantile paralysis, who had reached the junior year but who seemed to be making no progress. His record showed D's and E's, as well as failure in the shop work he had attempted. On the other hand, Mr. Dodd found that he was interested in agriculture (no instruction was available in agriculture in this school) and that his relatives were not only willing and able to send him to California Polytechnic School at San Luis Obispo for training in poultry raising but also to start him in business when he was prepared. A plan therefore was worked out along this line, including present and proposed training and establishment on his project. While completing his present year's work in high school, his program has been modified to include special shop project training in making poultry yard equipment, and also the elements of bookkeeping as aids in his future business venture.

This practical solution of a school problem led to a survey of other cases, and the programs of three other physically handicapped pupils in this school were also modified as a result of Mr. Dodd's advisement.

The services of the State Bureau of Vocational Rehabilitation are primarily the advisement, vocational training, and placement of physically handicapped adults injured in industry or otherwise, but since all disabled residents of the age of 16 years or over may be eligible, the Bureau will be glad to confer with school authorities on problems of this nature. It is to be understood, of course, that the purpose is not to offer a substitute for high-school training but to give direction to such training as a practical basis for future vocational endeavor. When the handicapped boy or girl eventually leaves school, specialized training may be given, if necessary, for adequate job preparation.

Chemistry in the Trade-Extension Field

By RICHARD H. BEHRENS
Berkeley High School

Trade-extension has for the most part followed a conventional pattern rather closely, offering courses either strictly paralleling or growing directly out of the work given in the all-day unit trade classes. Tradition, as well as the lack of specific equipment and general facilities, has been responsible for confining trade-extension work within these narrow limits. It must of course be obvious to anyone that in view of present-day economic conditions expensive equipment and space in a school plant cannot be justified on the basis of a relatively small group of students meeting only a few times weekly.

The general courses offered in the trade-extension field have met a great need and have justified themselves completely. Subjects as fundamental as machine-tool processes, welding, electricity, drafting, and woodworking necessarily offer opportunities for workers in a great variety of industries. At the same time, the specific needs of workers in industries not very closely related to the fundamental occupations taught in the day-school classes have not been well served. Workers in industries which are founded largely upon chemical and biological processes, as well as those engaged in the semi-professional fields, have not received the consideration in the trade-extension program which the importance of these fields justifies. The needs of these workers have been met in part by the regular academic courses in chemistry offered by the night school. These courses, no matter how well organized and excellently taught, cannot be regarded as either efficient or well

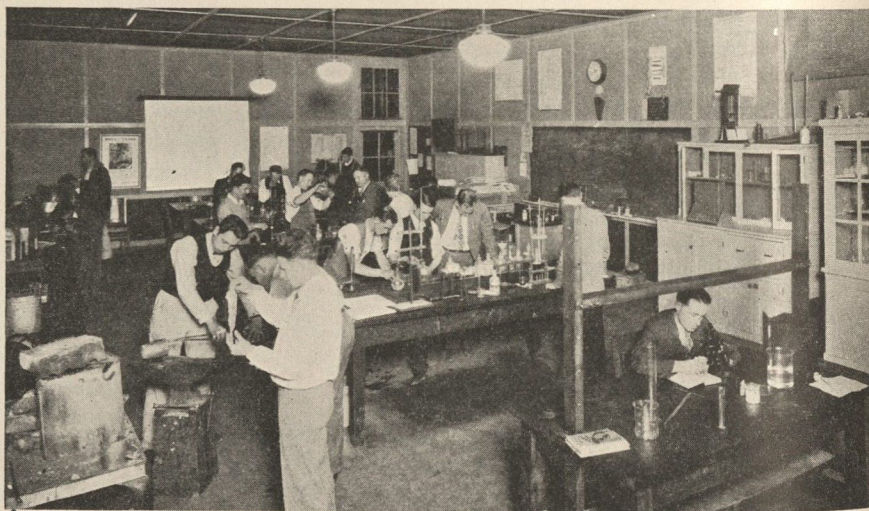
conceived for the worker who turns to the school for specific aid in the solution of specific problems, since the emphasis is on chemical principles rather than on their practical application, and since, moreover, the instruction is directed toward general cultural and college preparatory purposes rather than toward specific practical problems. An additional obstacle in adapting a general academic course in chemistry to serve the needs of the industrial workers is the fact that in most cases the teacher of chemistry has had very little, if any, experience in the field of industrial chemistry.

Course for Three Groups

Recognizing the need for chemistry for industrial workers, the Trade-Extension Division of the Berkeley High School has instituted a course in elementary industrial chemistry planned to meet the needs of three groups of learners: (1) workers, foremen, superintendents, and engineers in industries dependent largely on chemical or biological processes; (2) laboratory helpers and tech-

nicians; (3) salesmen and non-technical workers in chemical industries. Attendance at class meetings and general interest in the work have justified the course on the night-school program. A brief account of the experiment is submitted below in the hope that administrators in the field of trade-extension work may realize that effective service may be extended to a large group of workers at a relatively small expense to the school.

Since the nature of the work which could be offered was of a distinctly elementary character, no elaborate equipment nor supplies were needed. A large laboratory used during the day for classes in industrial science related to the various trades, taught as part of the day-unit industrial work, was used as a classroom. Equipment was limited to that found in a general analytical



GENERAL VIEW OF EVENING TRADE EXTENSION CLASS IN INDUSTRIAL CHEMISTRY AT BERKELEY, CALIFORNIA

laboratory including an analytical balance, the requisite chemical glassware, and volumetric and gravimetric apparatus. In addition, the class had the use of equipment provided for instruction in industrial-science classes in the seven trades taught in the day school.

Since the class showed great diversity in chemical background and experience, it was necessary to establish a fairly common basis for the individual work which was to follow. Many of those enrolled had not been exposed to high-school chemistry, while others had not only had chemistry in high school, but were also actually working as chemical technicians in industrial laboratories. Therefore, to meet the needs of this heterogeneous group and to help the teacher gauge each student's capacity with some degree of accuracy, a general intensive review of basic chemical principles was undertaken. For this purpose a text, "Introductory Chemistry," by Neil E. Gordon (World Book Co., 1927), was used. This text proved particularly well adapted to the purpose since the first part provides a restricted survey of those essen-

tials of chemistry without which little progress could be made in the work which was to follow. This unit was presented by the teacher who demonstrated experimentally the principals involved whenever possible. The success of this procedure was demonstrated by the intelligent attack on subsequent work as well as by attendance records during the presentation of this unit.

Occupation Determined Problems

The review finished, the composition of the class from an occupational standpoint was allowed to determine the content of the course. The enrollment represented a wide range of industries. There were plant foremen in petroleum refineries, galvanizing works, and electroplating establishments, an owner of a preserving plant, a confectioner, a lense grinder, a barber, mechanical engineers employed in oil refineries, a number of salesmen representing paint companies, oil refineries, and food-products concerns, a number of chemical laboratory technicians in food-products industries, printing-ink works, and explosive works, together with a few trade workers in the painting and steel heat-treating industries.

Many of the students had neither definite problems nor conceptions of the work which they might pursue. For these and the chemical technicians a short-unit intensive course in qualitative chemical analysis was arranged with particular emphasis on its practical applications to industry. Baskerville and Curtman's book, entitled "A Course in Qualitative Chemical Analysis" was used. While work was progressing on this unit, the teacher endeavored to determine their particular problems by individual contact with the students and attempted to guide them by suggesting and outlining specific study and laboratory work directed to meet their needs. Since the ability to identify and measure chemical change is fundamental to understanding any chemical process, the brief amount of time spent on qualitative analysis was well employed.

The individual needs of the students having been rapidly discovered, an interesting variety of projects was handled in the course of the work. A few may be given as typical examples.

An owner of a preserving plant was faced with a multitude of problems in the control and improvement of the processes carried on in his plant. A visit by the teacher to this plant brought out a number of possibilities which had not before been recognized. An immediate effort was made to aid this owner to establish a few of the most necessary control operations, such as, determination of acidity, hydrogen ion concentration, pectin content, and strength of jelly. Each of these problems was attacked by the student during class-work with the result that a small control laboratory was immediately established in his plant and control exercised over the various processes of the plant.

Two members of an electroplating firm who were concerned with the measurements of the hydrogen ion concentration and the testing of the composition of their fluctuating plating baths were instructed in the use of the colorimeter in determining hydrogen ion concentration, and the analysis of the metal content of the solutions with which they have to deal.

A confectioner interested in the mixing of flavoring materials was given guidance and practice in securing intelligent mixing of flavoring formulas from ethers, esters, and essential oils, as well as in the extraction of natural flavors from natural products. A problem in the utilization of rice flour in a confection was satisfactorily worked out under guidance by this student.

One student, a chemical laboratory helper, wished to learn how to determine the sugar content of dried fruit, a test commonly carried out in the laboratory in which she was employed. She was assisted in preparing the solutions and sample and given practice in the titration process used in her plant. Inasmuch as the owner of the preserving plant had not yet learned the means of volumetric analysis of sugar solutions, he was glad to cooperate in this project.

Through the varied projects carried on in class, a constant thread of progressive, practical chemical instruction was carried on, particularly by the students engaged as laboratory helpers. Following the unit in qualitative analysis, units in practical volumetric and gravimetric analysis were offered.

The interest shown in the instruction and service given through this course has been particularly gratifying during the pioneering days of this work. In spite of limited supplies and facilities, attendance upon classes has been such that a consideration of similar service courses for workers in chemical industries might well deserve the attention of organizers in the field of trade-extension work.

Automechanics Analysis Revised

During the past year a distinct effort has been made to improve still further the courses in trade technical and related technical instructional material at the trade and industrial teacher-training center in Los Angeles. Through the cooperative effort of George C. Wright and the writer the syllabus has been revised, and the instruction sheets have been improved, all with the purpose of providing teachers of technical instruction with the best possible organization of curriculum material in these two fields, so that they, in turn, may present a better organization of this work to their students. The related field presents many problems and, although a large number have been solved, there yet remain enough to attract considerable attention for some time to come.

A new automechanic's analysis bulletin has been completed to which is added several features not appearing in the past analysis. In this analysis a discussion and organization of the trade technical and related technical material of instruction is presented. Sample instruction sheets are also given. Another section of the bulletin includes the organization of courses of training that may be selected from the analysis for all day trade schools, evening schools, cooperative and part-time schools, industry, short-unit trade courses, etc. This bulletin presents a complete picture of the trade and the most recent refinements in related material and course organization. This bulletin should be off the press early this summer.

DAVID F. JACKEY.

Problems of Occupational Training for Adults

By J. C. BESWICK

Assistant Executive Officer, Commission for Vocational Education and Chief,
Bureau of Trade and Industrial Education

At the recent annual convention of secondary-school principals in Los Angeles one section meeting was devoted to the problems of occupational training for adults.

Technique of Conference Leading

At the request of the group the leader presented briefly the outstanding features of the technique of conference leading. The objective of conducting meetings by the conference method is to develop group thinking through discussion in order to promote better understanding and to arrive at possible solutions of problems, whenever possible. The proper organization, the room arrangement, and the physical equipment are all very important in the success of any conference.

Method used.—First, the problem should be isolated; second, it should be clearly defined; third, it should be evaluated; fourth, conclusions should be developed; and fifth, the group conclusions should be tested.

Typical situations confronting conference leaders were presented and discussed, such as dealing with the individual who is sure he has the right solution, or who intentionally diverts discussion, or who arrives too quickly at the right conclusion, or who won't express an opinion or many other familiar situations. Certain difficult conditions usually met by conference leaders were presented and discussed.

Characteristics of the leader.—The leader acts as referee, directs the thinking of the members of the group, summarizes points of agreement in discussion, but does not make decisions.

Conclusions.—Discussions developed that school administrators can use the conference technique in dealing with their faculties in developing curricula through teacher participation; for improving courses of study; for the better solution of any problem to be taken up with the faculty to secure an expression of the best group thinking; and for the organization of foreman-training conferences, and for the training of conference leaders.

Economic Considerations

In answer to the question, "To what extent is the school administrator's knowledge of contemporary economics and changes in business and industry basic to the program of occupational training for adults?" the forum leader presented some of the social and economic factors involved. Group discussion brought out that the status of all industry is changing rapidly; science, invention, and research are developing new processes and whole new industries; further training for adults is needed to meet changing conditions and thus stabilize employment; and re-training is necessary for those whose jobs have been eliminated. The group also discussed methods of determining how much pre-employment training and trade extension training are needed; the importance of well-selected advisory committees in all fields in which occupational training has been set up for adults, etc.

Type problems in occupational training for adults were discussed—situations in which the programs were based on

the administrator's knowledge of condition and need. The first discussion pertained to the stone-cutting industry at Raymond City. Stone cutting is the dominant industry of that locality, and the largest source of taxes for the schools. The high school principal, conscious of the responsibility that he had to render the best service to the community, requested the State Department of Education to confer with the management of the stone quarries, and study their needs. The management desired to maintain existing wage scales by increasing efficiency through organized training, and also to stabilize employment through training to enable them to meet the keen competition with other quarries outside of the state. Because of the great amount of handwork in cutting granite, the management desired to utilize training to reduce the cost of production so as to enable them to compete with cheaper substitute materials of inferior quality.

A training program was suggested, an advisory committee from the plant was appointed to work out with the high-school principal a satisfactory training plan, and practical instructors from the plant were selected to give the instruction. One of the long stone-cutting sheds at the plant was provided for organized apprenticeship training on the job. Evening school trade-extension work was established at the plant for journeyman workers. Much discussion on details of organization and operation of this program took place, and valuable suggestions were made by the group. This program changed the attitude of the plant management towards the management of the local high school. It also changed the attitudes of labor towards changes that were taking place through new machines and new processes. Also, it stabilized the employment of the workers.

Changes in building construction, one of California's basic industries, were discussed. Certain changes were noted due to the use of new materials, new processes, and the diminishing supply of highly trained all-round craftsmen. Several administrators cited the striking change in the plumbing trade. Pipes are no longer being screwed together on large construction work, but are welded. Need for welding courses for plumbers was brought out through requests to school administrators by the industry. Advisory committees were appointed to assist in setting up practically all courses in welding for plumbers.

School administrators from San Francisco, Long Beach, Los Angeles, Fresno, Pasadena, San Jose, Oakland, and Martinez reported the organization of welding courses to meet the economic need of this trade. The principal of the Alhambra Union High School of Martinez reported that welding courses were organized to meet the changing need of their dominant industry—the oil industry—for technically trained welders for the refineries, because welding processes are constantly changing in the oil refining industry and in the field, due to the use of new materials and new processes and new welding machines.

The director of vocational education of Pasadena reported that contractors of Pasadena had to go elsewhere to

secure craftsmen to do the fine ornamental plaster work required. A study revealed a definite need for courses of training in ornamental plastering for regular plasterers. Programs were set up to meet the needs. Jobs were thus stabilized for Pasadena craftsmen, and a better attitude was created on the part of contractors towards the educational service of the Pasadena public school system.

The principal of the Humboldt Evening High School, San Francisco, reported that bakers were losing business because of the lack of knowledge of artistic cake decoration. Organized training was set up for bakers, to train them in cake decoration. This increased business, and stabilized the jobs of bakers. The principal of the Central Trade School, Oakland, reported a similar situation.

The director of vocational education of San Jose reported that an economic need had developed in the butcher business which demanded more scientific meat cutting and estimating of costs. An organized training program which was set up stabilized both employment and the meat industry, and rendered a real service to the community.

The principal of the Fortuna High School reported that the management of the Northwestern Pacific Railroad Company had notified the station agents of their line that they would be dismissed if they could not use the Morse code by a given date. Training courses were organized at the Fortuna High School which enabled a number of these agents to qualify in telegraphy, and thus maintain their positions with the company.

Summary

It has been proved conclusively that administrators have direct responsibility for the knowledge of contemporary economics and changes in business and industry basic to the program of occupational training for adults.

Both pre-employment and extension training are necessary in occupational courses for adults.

Surveys and studies should be made to keep knowledge abreast of community needs.

It is very important to set up advisory committees for successful programs.

Re-training is necessary where adults have been displaced through elimination of their jobs.

School administrators who keep in touch with community needs with the idea of rendering service incidentally stabilize their own jobs.

The length of the course of training should depend upon local demand.

Short unit courses should be organized in occupational training for adults.

Occupational training for adults stabilizes employment.

Related Material Ready for Trade Classes

The University of California at Los Angeles, Division of Vocational Education, has developed in certain teacher training classes much material in the form of training programs and instruction sheets of trade and related technical content. Many teachers, and some principals, have asked how this material can be obtained. At the

present time it is possible to obtain a printed set of twenty-one charts representing a two-year vocational high-school course for automechanics. This course has been analyzed for instruction units of production, skill, and required knowledge as well as for desired or related technical knowledge.

Trade teachers may write to George C. Wright, 6171 Piedmont Avenue, Los Angeles, or to the Division of Vocational Education, University of California at Los Angeles, for a set of the automechanic's charts, price 70 cents, prepaid. With these charts will be found sample instruction sheets. Sets of instruction sheets will be furnished at the lowest possible price consistent with time, material, and labor costs. Prices will range from \$.003 to .01 per sheet, depending upon quantity. If the material is to be purchased by student body funds for distribution in loose leaf form to trade students the price will be near the low figure depending upon quantity. Postage or shipping charges will be extra.

Approximately 150 instruction sheets in automechanics to be used on the job can quickly be made available. The complete course when developed will add many more. Approximately 300 sheets of additional material is available for related work.

For automechanics related technical instruction the following units are available:

<i>Units</i>	<i>No. of Units</i>
Industrial history used in all trades.....	17
History of automechanics	7
Trade survey	11
Job ethics used in all trades.....	19
Index of related science applications under principles	32
Index to related science, topics under blocks of trade with references	10
Index to related mathematics topics under blocks	1
Science units usable in many trades.....	138
Special science of automechanics.....	39
Civics usable in many trades.....	18
Industrial organization and applied economics	5
Bibliography in automechanics and machine shop.	
Trade technical material for automechanics:	
Tire service and repair	15
Lubrication	13
Washing and polishing.....	7
Battery service	1
Quick service (tightening, etc.)	33
Brakes	39
Cooling system, universal joints.....	14
Clutch	2
Engine	13

Course charts and material can be made available for several other trades provided a demand is evident. A large demand for this material will make it possible to improve the quality of the stock and produce the sheets in form for loose-leaf binding. Part of this material is printed and part of it is mimeographed. As the quality improves and the material proves its worth it may be run off by one of the better offset processes.

GEORGE C. WRIGHT.

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Continuation Education Homemaking Education
Civilian Vocational Rehabilitation
California Vocational Federation

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SUMMER SESSION IN VOCATIONAL EDUCATION AT BERKELEY AND LOS ANGELES

At the 1932 summer sessions of the University of California the Division of Vocational Education will present six types of courses: (1) general courses in vocational education and guidance, designed for persons

interested in those fields of education; (2) courses in commercial education, dealing with special problems in the field; (3) the summer curriculum for training trade and industrial teachers; (4) certain upgrading courses, open to individuals who have completed the requirements for the vocational arts credential; (5) courses in continuation education; and (6) conferences for executives or managers in industry.

In Los Angeles the full curriculum of courses will be offered leading to the special secondary vocational-arts type credential. For holders of the vocational arts credential who have completed the 16 units of the teacher-training course a 6-unit course dealing with the related technical curricula is offered. Upon completion of this course and its prerequisites the candidate is entitled to the credential in related technical subjects. These six units may also apply in securing the long-term credential. A number of other courses in education may also be applied in satisfaction of the 6 units required for the long-term credential.* Approval of this program should be secured in advance.

In Berkeley no courses are this year offered for the vocational-arts credential, but conference leading will be demonstrated through a series of conferences for executives or managers in four industries. These conferences will be open to selected individuals in special fields.

A course in curriculum construction for continuation schools is offered in Berkeley for teachers who wish to work with a group who are developing instructional material especially adapted to the training of employed youths or of those who are seeking employment.

Commercial teachers will find methods in teaching typing and shorthand in Berkeley and methods of teaching typing and current problems in commercial education in Los Angeles.

Courses in Berkeley

Courses of General Interest

- S160. Vocational education: general course. Mr. MALLARY
2 units. M Tu W Th F, 8.
S164. Vocational guidance. Professor LEE
2 units. M Tu W Th F, 11.
S260A. Vocational education: Seminar. Professor LEE
Admission only on consultation with instructor.
2 units. M W, 4-6.

Courses for Commercial Teachers

- 362T. Demonstration and methods of teaching typewriting.
2 units. M Tu W Th F, 8. Miss GRADY
368S. Demonstration and methods of teaching shorthand.
2 units. M Tu W Th F, 9. Mrs. JENSEN

Courses for Teachers in Continuation Schools

- 168P. Curriculum construction for continuation schools.
2 units. M Tu W Th F, 3. Dr. PALMER
See also courses, Ed. S160, S164, 193, 124, and 387.

Further information concerning any of these courses offered in Berkeley may be obtained by addressing Dr. Edwin A. Lee, director of the Division of Vocational Education, University of California, Berkeley.

* This course may be accepted until September 15, 1932, as satisfying the additional six-unit requirement for the long-term credential. After September 15, 1932, it will be required as part of the teacher-training course and can not be accepted as satisfying the additional six-unit requirement for the long-term credential.

Courses in Los Angeles*Courses of General Interest*

- \$160. Vocational education: general course.
2 units. M Tu W Th F, 11. Mr. KIENHOLZ
- \$164. Vocational guidance.
2 units. M Tu W Th F, 12. Mr. CAMPION

Courses for Commercial Teachers

- \$32r. Demonstration and methods of teaching typewriting.
2 units. M Tu W Th F, 8. Mr. ROWE
- \$161c. Current problems in commercial education.
2 units. M Tu W Th F, 10. Mr. ROWE

*Curriculum for Trade and Industrial Teachers***FIRST YEAR**

- \$61. Occupational analysis and curriculum construction.
Mr. JOHNSON, Mr. WAIDELICH
Two sections. M Tu W Th F, 8-10. (No credit)
- \$62. Technique of vocational instruction.
Mr. JOHNSON, Mr. WAIDELICH
Two sections. M Tu W Th F, 10. (No credit)
Also \$160 or \$164. See above.

SECOND YEAR

- \$65. Problems of trade technical instruction. Mr. STIER
M Tu W Th F, 8-10. (No credit)
- \$66. Part-time, cooperative, and trade extension education.
M Tu W Th F, 10. (No credit) Mr. STIER
- \$67. Civic and employment relations. Mr. CAMPION
M Tu W Th F, 11. (No credit)

Advanced Course

- \$63. Analysis and organization of related technical curricula.
Mrs. DONOVAN, Mr. WRIGHT
6 units. M Tu W Th F, Sec. 1, 9-12 (Wright); Sec. 2, 9-12 (Donovan)

Further information concerning any phase of the program in Los Angeles may be obtained from Mr. Benjamin W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles.

D. H. BIERY ACCEPTS APPOINTMENT TO INDIAN SCHOOL

Appointment of Donald H. Biery to the superintendency of the Sherman Institute at Riverside, California, has been announced by the U. S. Department of the Interior. Sherman Institute is one of the largest Indian schools not located on an Indian reservation and has a strong program of vocational training.

Before coming to California Mr. Biery was principal of a high school in Arizona. After obtaining his master's degree at the University of California he was coordinator in the Berkeley Continuation High School, teacher-trainer in trade extension work for the Division of Vocational Education of the University of California and coordinator and later director of guidance and placement in the Oakland Public Schools. During the past year Mr. Biery has been making a survey for the Department of Vocational Education of the Los Angeles Public Schools. His many friends over the state congratulate the Sherman Institute as well as Mr. Biery on this new appointment.

CARPENTER MADE LOCAL DIRECTOR

Common factors in vocational, adult, and continuation education are being recognized in the appointment of individuals as city directors of adult, vocational, and continuation education. John E. Carpenter of Sacramento is the most recent appointee to such a position. Mr. Carpenter has been principal of the Sacramento Continuation High School for the past nine years and recently was given the responsibility for both the adult and vocational education programs.

Mr. Carpenter represents continuation education on the state council of the C. V. F., and has been active in this organization since its beginning. Members of the C. V. F. and other educators in the state will be glad to know of Mr. Carpenter's appointment to this position and have reason to expect an unusually interesting city program in Sacramento as a result of his directorship in these three fields.

SUMMER INSTRUCTOR-TRAINING CONFERENCE AT BERKELEY

The vocational teacher-training program at the 1932 summer session of the University of California at Berkeley will deviate considerably from the regular program. A series of four managers' conferences will be held, open only to selected individuals in special fields.

These conferences are a part of the progressive policy of the State Department of Education in making the California Plan for Vocational Education flexible to meet the changing conditions in industry. Trade extension training is growing throughout the state, and along with job training, is receiving recognition as an effective type of vocational education.

The conferences will probably be in the fields of food trades, building maintenance, and labor organizations. In addition to the conferences at Berkeley, an instructor training conference will be held in Los Angeles for school custodians. This conference will be similar to the one in Berkeley last summer, and will be held in cooperation with the California School Employees' Association.

B. E. MALLARY.

TRADE EXTENSION COURSES RESUMED

The shops of the Sacramento High School which burned down at the close of last year, have been completely rebuilt and are now in full use by the day trade classes. Trade extension classes in machine shop, automobile repair, sheet metal work, printing, and oxyacetylene welding which were interrupted by the loss of the building are now being started.

In addition, a trade extension class in aircraft propulsion and navigation has been started with H. F. Lusk, formerly superintendent of the Sacramento Airport and now instructor in the Sacramento Junior College, in charge. About one hundred apprentices are in the Southern Pacific railroad shops. In previous years the schools have conducted a trade extension class at the railroad shops. This class will be resumed in the near future under a cooperative arrangement between the railroad management, the Shop Crafts Association, the Sacramento school department, and the State Commission for Vocational Education.



CALIFORNIA VOCATIONAL FEDERATION



OFFICERS

President—Morgan N. Smith, Glendale High School.
 First Vice-President, John E. Carpenter, Director Vocational Education, Sacramento.
 Second Vice-President—Wayne L. Johnson, Napa High School.
 Secretary—John G. Miller, Frank Wiggins Trade School, Los Angeles.
 Treasurer—Willard H. Van Dyke, Petaluma High School.
 Editor—James A. Hull, Alameda High School.

Do You Know the C. V. F.?

Over the state there may be many teachers who do not understand what the California Vocational Federation is, what state associations make up its memberships, how it works with the California Teachers Association and the American Vocational Association, and how it is represented in them. To answer all such questions would require a full history of the Federation up to date, together with charts to show how it functions, followed by a list of activities and accomplishments. Every teacher will be more enthusiastic over the organization when he sees "where the money goes" and has something tangible before him as a product of the Federation. This tangible evidence will appear shortly in the form of the first issue of a California Federation publication. This initial issue will be sent, as nearly as possible, to every potential member of the C. V. F.

The topics to be covered in this publication are:

1. Past and pending legislation important to vocational teachers.
2. Major problems confronting vocational work.
3. Explanations and clarifications of credential requirements.
4. Terminal vocational curricula in junior colleges.
5. Where to go to summer school.
6. What has been done by the A. V. A.
7. Evaluation of trade experience in terms of college credit to be used toward a college degree.
8. The tenure situation.
9. A forum on "what is being done, and what can be done for students who may be classed as misfits in the existing public school set-up."
10. A symposium from the rank and file of vocational teachers on "Suggested changes which might improve the present plans for vocational education."

In addition to the above and other broad topics, an endeavor is being made to provide something of particular interest to each unit of teachers composing this Federation. There will be something for the teacher of dairying, husbandry, or poultry raising, of machine shop work, printing, painting, or construction work. Every individual unit will be represented if possible. The goal of this unit work will be an effective set-up which will make possible rapid and efficient collective consideration of problems confronting these groups as groups or the consideration of the individual problem of some teacher who wishes to

profit by the opinions and experiences of others in his particular line of work. The next school year should see a great development of this phase of vocational federation work.

With a large membership actively engaged in working for the interests of the products of public education—the student of today growing into worthy, active citizenship—there will be no question as to the outcome of such a vocational federation. It will be in a position to help mold the future of all California vocational work—indeed, its influence cannot be held within the bounds of our state.

J. A. HULL

Administrative Council Meets

The last Administrative Council meeting of the California Vocational Federation was held at Santa Barbara State Teachers College, Santa Barbara, April 2, 1932, as the guest of President C. L. Phelps, of that institution, and E. E. Ericson. Reports were given by the various district representatives, which indicated progress throughout the state in behalf of vocational education.

This was the first meeting at which representatives from the state departments were present, taking active part in the meeting. This was made possible by the fact that at the previous meeting memberships were voted to the various chiefs of departments. Many advantages are to be derived from their association and the council greatly appreciated the many suggestions and the cooperation of the State Department of Education.

The second new feature was the introduction of the representative of the California Teachers Association, as an exchange of courtesies between the California Vocational Federation and the California Teachers Association, the Federation being affiliated with the C. T. A. It was felt that this was a most desirable type of cooperation.

The reorganization of the Committee on Evaluation of Credits was proposed and is now in the hands of R. E. Gilbert, as chairman. It is believed that under the new organization, of dividing the work into a northern and southern section, additional progress will be made.

A report on the development of vocational educational work in the Bay Section of the C. V. F. was given by their representative, and showed real progress for the work. The report from the Agricultural Association showed their usual progress, and gave evidence that this association is one of the strongest in the Federation.

The Continuation Education report indicated that progress was being made through the northern and southern associations which are conducting helpful programs.

Final meetings for the year were to be held in both sections in May. The California Industrial Education Association reported plans for holding a conference at Santa Barbara sometime during the summer; they also reported that the southern section of the C. I. E. A. would hold their next meeting in Pasadena on May 7. The president of the Southern Section of the C. V. F. reported that it was planning to have an all-day meeting of that organization on April 23, at Long Beach, and that a program would be sent as soon as available.

The Aeronautics Teachers Association reported, through its president, of holding a meeting of that group at the Grand Central Air Port, in Glendale, with a very suc-

cessful program, and that their next meeting would be held in Pasadena, on May 7, in conjunction with the C. I. E. A. The A. T. A. is an organization of state-wide distinction and it is hoped that the various members of the council will cooperate in helping develop memberships for this group. Standardization in training and close affiliation with industry are two of the main objectives.

There was considerable discussion regarding ways and means of bringing before the individual members of the Federation more definite material so that the members would have tangible evidence of the existence of the Federation. The financial problem in accomplishing this matter seems to be the stumbling block of the plan. It is hoped that an increase in membership can be obtained so that more funds will be available to accomplish this result.

The application for membership by the council of the California Society for the Blind was very favorably received, and power given to the executive committee to pass judgment on the membership.

Considerable time was spent on matters of shifting of taxation from county to state, as regards public schools. The problem of teachers' tenure was also discussed. Many vital points were discussed; it is believed that the council members are in much better position to make progress in solving these two problems.

The meeting adjourned to meet again some time in July. The exact date will be arranged by Mr. Gilbert.

JOHN GEORGE MILLER, Secretary.

Industrial Education Association

The California Industrial Education Association is only a youngster. It is not quite two years old. But what a youngster! A number of readers who are potential members of this organization hardly realize that this is a state association of industrial education teachers—both of industrial arts and Smith-Hughes work. This association is not only carrying on a big constructive program of its own but is working collectively with the other state associations in the California Vocational Federation, and through it into the A. V. A.

What the C. I. E. A. is doing in these three cooperating organizations is interesting and effective, and is vital to the immediate future of the industrial phase of vocational education. Space in this publication does not permit giving all the information about this organization.

Special Bulletin Coming

Very shortly there is due off the press a special bulletin, being published by the C. I. E. A. The outline which has been presented forecasts a very worthy publication. It is being produced under the editorship of J. H. Bedford of the Herbert Hoover High School at Glendale. Should you by chance fail to receive your copy, write Mr. Bedford regarding it. You will be interested in the detailed report of how the organization is functioning and what it has actually accomplished this past year.

The Summer C. I. E. A. Conference

The California Industrial Education Association will hold its annual summer conference at Santa Barbara State Teachers College, July 14, 15, and 16. Those in

charge of the program are leaving nothing undone which will make attendance profitable. Santa Barbara is glorious—and the genuine welcome extended by the Teachers College will combine with other factors to assure any who attend this conference a happy and worthwhile time. A detailed program will be published in the summer school bulletin of the Santa Barbara State Teachers College. Every industrial education teacher in the state who is free to do so should be there to help mold the plans of this organization for the coming year. You have, through this association, the opportunity to help shape the policies of industrial education throughout the state.

Local Groups Organized to Function

The whole state association of the C. I. E. A. cannot meet often enough to accomplish its full purpose. To make this organization more effective it has been divided into sections very similar to the sections of the California Teachers Association. Each of these sections working as a smaller unit can get together more often and can more easily and effectively consider the individual problems and opinions of each teacher than can the association as a whole.

A short description of the Bay Section Council of the C. I. E. A. will show how this is accomplished. An endeavor has been made to have one representative appointed by each school within the Bay section which is doing any industrial education work. These delegates or representatives form the council and meet regularly through the school year. The local president or the state officers may wish action on a certain question—a policy, a proposed state law, a change in the state plan for industrial education, etc. Instructions are given to each representative in this council to consider such questions with other industrial education teachers in his own school.

At the next council meeting all these representatives or delegates will bring together the opinion and consideration of every industrial education teacher in the district. They are thus pooled and recommendations are made. All of which means that the state organization can get collective thinking and action on any important consideration without waiting for a state convention.

This set-up is designed to work also from the individual member (the teacher in the field) up to group consideration. *Every individual* and *every school* is encouraged to present through these council meetings any problem related to school work which group thinking can help solve. It is a representative plan which is ideal for effective work. Any member of the C. I. E. A. is welcome at these meetings without being an appointed delegate. Come, sit in, and see what is being done!

J. A. HULL.

BAY COUNCIL, C. I. E. A., ORGANIZED

The Bay Section Council of the C. I. E. A. was formed through the initiative of R. E. Gilbert of Fremont High School in Oakland, who, as past state president of the C. V. F. and of the C. I. E. A., is authorized to form local section councils. Delegates from various bay district high schools and junior high schools, where industrial arts or trade and industrial work is taught, were assembled and the council formed.

The following officers were elected:

President—A. W. Rees, Crockett

Vice-president—E. W. Kilgore, San Francisco

Secretary-treasurer—C. H. Townsend, Oakland.

These officers were installed and the organization completed.

The executive board is completing the constitution and by-laws, the appointment and instruction of committees, and other phases of organization necessary to make this council a functioning unit of the state and national program of vocational education.

It is planned to issue bulletins giving information to our delegates and the teachers they represent regarding the activities of the council and of the executive board.

A. W. REES.

What Is the Answer?

“What does it all mean?” “What is the answer?” I sit facing these two questions. They are not alone my questions. They have been uttered by teacher after teacher as we have sat, sometimes far into the night, discussing problems for which we earnestly seek the answers.

Perhaps the solution can come only from the pooling of the best thought of all those concerned with vocational work. Let us consider just three statements first: “The vocational teacher faces responsibilities for the student other than developing hand skills and trade judgments, and the imparting of technical knowledge.” “Our ideal should be to develop the student so he may be able to get a job, keep the job, or get a better one.” “The teaching profession is at least one generation behind the times.” Are we justified from the above statements in asking the following questions?

1. What must we add to trade teaching to guarantee a job on graduation?
2. What must we do to overcome a one-generation lag?
3. How much attention should be paid to the law of supply and demand?
4. Is it a local responsibility to train only for the local community so as not to “flood the market” there?
5. Are we justified in assuming that if a boy cannot fit into the exact trade for which he was trained he will find a place in one of the allied trades?
6. Do we ever find it easy to say, “Well, the best man will get the job and those left will go somewhere, at least that is about all our universities are doing, so why shouldn’t we?”
7. What of the theory that some day the numbers being trained will be studied scientifically as a national problem, with national quotas or allotments set for each trade or profession? Can any man be endowed with judgments sufficiently keen to set a goal or quota? Would stabilization curtail national development?
8. How may the rapid swing toward automatic or semi-automatic machinery on the part of industry affect our industrial training program? Will this change very largely divide the workers into two main classes—those who must be highly trained, highly skilled, of inventive and engineering caliber—and a second class which will be able to learn to operate these machines in a few hours or a few weeks? Will the highly skilled class be trained in high school, trade school, junior college, the universities, or in and by industry? What training, if any, should be given to those thousands who will operate the machines, the learning of

which takes but a few weeks, and the operation of which may be reduced to five or six hours a day?

Apart from the questions of technical training we hear questions regarding other kinds of training, for industrial workers. What is the significance, if they be true, of such statements as, “Our schools should be emphasizing training for the worthy use of leisure time,” and “The goal of education is citizenship?”

1. How can citizenship be taught?
2. In what classes shall we teach the worthy use of leisure time?
3. Is character a necessary part of citizenship?
4. Can even a noble character fail to realize the duties and responsibilities of the highest type of citizenship?
5. How are such questions answered in our vocational departments over the state?
6. How may we as individual teachers learn to do the best job of “developing the individual” of which we are capable?

We are given figures to the effect that “Sixty-five per cent of the juvenile labor turnover is the result of inability to get along with people, the human relations situation between employee and employer or between worker and worker rather than inability to do the actual work.” In the light of this statement the report which follows of a class conference discussion of a study case is related in the hope that it may provoke discussion on the part of readers. Will you not let us know your reactions? Is it out of place and too “cold storage” to be worth while? This case has served as a round-table study for a class of woodworkers and carpenters.

“A carpenter was also qualified as an architectural draftsman. The architect for whom he was drawing was supervisor on a hotel building under construction. The work in the office decreased temporarily to the point where the draftsman could not be kept busy. It was mutually agreed that it would be satisfactory for the carpenter to do work, for a time, on the hotel—awaiting work in the drafting room. The architect sent the carpenter with a note to the job superintendent asking that if possible he use him on the job until other office work developed.

“The superintendent did not think much of this as a way to get a job and proceeded to say as much to the carpenter, but he ended by telling him to bring his tools on the job in the morning. Two or three days later it was necessary to lay off several men, including the carpenter, due to delay of plasterers getting off the job. These men were to keep in touch with the job and were to be taken on again when the work was ready. This particular carpenter kept in touch through the architect who was on the job every day. Shortly the architect informed him things were ready to ‘shoot’ again, so the next morning he reported to the job, secured his tool kit and started up the approach to the building. He was accosted by the superintendent who demanded, ‘Who told you to come on the job today?’ The carpenter tried to explain what the situation seemed to be, but the superintendent asked, ‘Who the ——— is running this job, the architect or am I? I don’t want you on the job before tomorrow morning.’ So the carpenter, again unable to clear matters left the job to return the next day. Under this strain the carpenter worked on the job

until the first pay check was given him; on opening the envelope he discovered he had been overpaid a full day's wage."

What should he do about the overpay? This case was taken up as a study and an endeavor was made to decide what the carpenter should have done and why he should have done it, before telling the class just what actually happened. The following notes are copied from the discussion and blackboard work with this class:

First impressions:

1. Keep the money.
2. Superintendent might be checking on the honesty of the man.
3. The majority would keep it.
4. If he wanted to make an impression on the superintendent he should take it back and he might get a better job.
5. The timekeeper would want him to come to him about it.
6. Maybe it was the office girl writing the check who made the mistake. She might have to make up the loss.
7. If the superintendent asks about it, tell him "I didn't keep track."
8. Make believe you didn't notice it.
9. Go to the timekeeper about it.
10. Offer to work an extra day.
11. Tell timekeeper to report only 4½ days next week.
12. Keep it but have it ready to give back.
13. Big corporation would never miss it.

After somewhat of an evaluation being made of the above opinions and statements, with a good cross-fire on the part of the students, a secret ballot was taken on the following two questions: Would you, under the circumstances, keep the money? What per cent of high school boys do you feel would keep the money under these circumstances? Forty per cent of the ballots said they would keep the money; 60 per cent said they would return it. The average of the answers to the second question indicated that, according to their guess, 77 per cent of high school boys would keep the money.

The class was finally told that the carpenter returned the check to the superintendent and the correction was made. The superintendent was seemingly surprised that the check was returned, but a decided difference in attitude was noticed by the carpenter on the part of the superintendent toward him on the job. Some of the best work on the job was given to him, much of it being difficult, particular work requiring a high degree of skill; and when later the carpenter had an occasion to get a recommendation from the company this superintendent wrote an exceptionally fine letter for him.

Does this type of discussion warrant a place in the set-up for developing job ethics, human relations, character, honesty and good citizenship? Through such a case study would it be possible to go into the question of how to get a job, and mistakes which one sometimes makes; of the relationship between the worker, the superintendent, the job supervisor or the owners of the construction company? Can we expect a definite "carry over" from such a study to the extent of influencing actions or judgments which may come to the experience of these boys?

Do your part by mailing your reactions to the Editor of C. V. F., 2440 Russell Street, Berkeley.

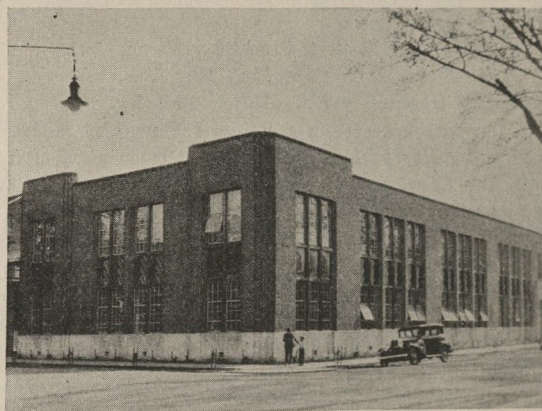
J. A. HULL.

New Building for Stockton Continuation School

The director and faculty of the Stockton Continuation High School can take all the blame or praise for the fine new building which has recently been completed to house their growing continuation-school organization. Each teacher had the unusual opportunity to work out the floor space desired for his or her work. The director took these suggestions and worked them into a plan that would fit the available ground space and come within the available funds for construction.

The architects respected the desires of the faculty and did not alter the plans in any way without first consulting the director or the teacher concerned.

The exterior of the building is very plain, with a modernistic touch of architecture. It covers a ground space of 60 by 144 feet, and is two stories in height. The halls are all wide and well-lighted. The rooms are also very well-lighted and touched with color to lend them cheerfulness.



STOCKTON CONTINUATION HIGH SCHOOL
Courtesy, Losekann & Clowdsley, Architects

The building houses the present program very comfortably, with room for some future expansion. The main office is comfortably large, with offices adjacent for the director, assistant director, and dean of girls. On the same floor with the offices are the show card, mechanical, and architectural drawing rooms, apprentice laboratory, personal hygiene, shorthand, English, and the necessary toilet rooms. On the second floor, a typing, bookkeeping, sewing, cooking, and dining room, a rest room for girls, and a social hall are to be found.

Since moving into this new building, we have noticed a marked improvement in attendance and in attitude toward the school. The boys and girls all seem to be proud of the building and so far, have cooperated to the fullest to keep it looking new and attractive.

We have also noticed quite an added interest in our program on the part of adults. Men and women are registering at the school, and attending regularly, who never heard of our school before we moved into our new building. Our present experience indicates that it will probably be only a short time until we will be using this new building to capacity.

FLOYD R. LOVE.

CONTINUATION EDUCATION ASSOCIATIONS NORTH AND SOUTH

The northern and southern associations of continuation school teachers held their spring meetings in May, one in Stockton and the other in Glendale. The northern meeting was held in the new Stockton Continuation High School with the president of the association, R. F. Aspinall, presiding.

A tour of the building preceded the general meeting. The architectural plan and decoration of the building were greatly admired as well as the equipment for classrooms and laboratories.

Mr. L. B. Travers, chief of the Division of Adult and Continuation Education, gave the luncheon address. Afternoon section meetings were as follows:

Industrial and boys general continuation

Leader: A. H. Eilert, Stockton.

Homemaking and girls general continuation

Leader: Miss Glenna Harris, San Jose.

Commercial and general continuation

Leader: Mrs. Gladys Hayford, Sacramento.

At the business meeting which followed, officers for the new year were elected:

President—A. H. Eilert, Stockton.

Vice-president—Myra Green, San Francisco.

Secretary-treasurer—W. T. Hicken, Berkeley.

At the southern section meeting, the morning address was given by Harry M. Shafer, assistant superintendent of schools, Los Angeles, who spoke on the topic, "Continuation education offers the junior worker what he needs."

Round table discussions were followed by a luncheon meeting at which G. U. Moyse, assistant superintendent of schools, Glendale, was toastmaster. Kenyon Scudder, chief probation officer, Los Angeles County, spoke on "The schools responsibility for the social rehabilitation of youth."

PRINCIPALS DISCUSS ADULT AND CONTINUATION EDUCATION

Eight discussion meetings were held during the spring meeting of the High School Principals Convention in Los Angeles on problems in the field of adult and continuation education.

At the first conference L. B. Travers, chief of the Division of Adult and Continuation Education, was the discussion leader with the topic, "Problems of Curricula and Problems of Finance." The financial problems which face the public schools at present permeated the whole convention. Programs of adult education face curtailment in some communities. The share of the cut which adult education might take and the responsibility of the schools for the continuance of the adult program were therefore discussed at this meeting. The need for a more careful evaluation of the adult education program was recognized and the following fourteen points were suggested for consideration:

An adult education program will be efficient in proportion as:

1. It sets up social service objectives that are attainable through the use of known educational procedures, methods, and devices.
2. It does not discriminate between social or occupational groups.

3. It provides an efficient agency for the selection and guidance of people into specific educational courses.
4. The most efficient type of organization is used in meeting any given community need.
5. The objectives set up are real educational objectives, rather than pseudo-objectives.
6. The personnel provided for operating the program is specifically qualified to perform its work effectively.
7. The administrative and supervisory organization controlling the program is efficient.
8. The service to be rendered is easily available to all those needing such service.
9. Working conditions are provided which enable the program to be carried on efficiently.
10. It commands the respect of the community groups for whom the service is organized.
11. All agencies having a direct interest are organized and utilized to make that program effective.
12. It keeps up with changing social conditions.
13. It commands the respect of the general public.
14. The spread of the program is representative of the adult educational needs of the community.

A discussion of adult vocational education was led by Mr. J. C. Beswick, chief of the Bureau of Trade and Industrial Education, and is reported elsewhere in this issue.

George C. Mann, director of vocational and continuation education, Berkeley, was the discussion leader for a group on the topic, "Problems of Continuation Education." Some of the special services of the continuation school which add to its expense were discussed: placement, coordination, guidance, individual instruction, small classes, clerical service, and the admission of adults.

Placement.—It was agreed that under present conditions placement service is needed more than at any other time. Taxpayers can realize that the schools must maintain a placement service for juniors.

Coordination and guidance.—Proper instruction is dependent upon coordination. If enrollments in continuation schools decrease appreciably the hours for home coordination might be somewhat decreased, but the continuation schools cannot afford to lose touch with the public.

Individual instruction.—Pupils who are working are producing wealth, subject to taxation, and therefore are helping the income of the schools. They, if any pupils, should receive the type of instruction which they need. On the other hand, the per-pupil cost to the district for their instruction is only about one-fifth of the cost of the instruction of full-time pupils.

Small classes.—Holding small classes necessarily increases the cost in any school, but the continuation school must hold classes at the convenience of the employer, which usually forces a distribution of classes over an eight-hour day. This often results in small classes. Also the continuation school is dealing with a problem group of children in which personal contact between pupil and teacher is of the utmost value. Too small a class is not stimulating to pupils or teachers, but the best work cannot be done *en masse*.

Cost of clerical help.—There is probably more clerical work in a continuation school than in a high school of the same size, due to the issuance of working permits, changes in program, and changes in enrollment. This is inherent in the nature of the school.

Adult enrollment.—Adults have raised the tone and interest in the continuation schools. As long as the adults are in the minority in the classes with the juniors they seem to have a salutary effect. Adults are not so unlike the juniors; they write on books and desks, are absent or tardy, and need the services of a coordinator as do the juniors.

Employers sometimes say, "We are a tax-paying corporation and we do not think it unfair that the school district should give our employees some consideration." The adult enrollment in the continuation school could not be cut without causing much criticism. The adults are property owners and taxpayers and have a right to the services of the school.

Grading Shop Classes

By H. A. SOTZIN
San Jose State Teachers College

The task of satisfactorily grading students has engaged the attention of educators and students of educational research for years. To date, it is doubtful whether any of the systems in vogue will meet with the approval of the majority of teachers. This disagreement is due to the wide divergence of opinion relative to the meaning or significance of a grade; or to the mastering of an assignment, subject, or text.

The grades of shop teachers are invariably higher than those of academic teachers. Among the reasons that may be offered are:

1. Greater pupil interest; hence, greater pupil effort.
2. More objective evidence upon which to base a grade.
3. Grades given entirely for manipulative achievement.
4. Manipulative and constructive intelligence are more abundant than abstract intelligence.

The final shop grades of 2,390 elementary, junior, and senior high school pupils taken from the records of 15 shop teachers show the following distribution of grades:

Grade	Number of students
(Passing grade 70 per cent)	
95-100.....	111
90-95.....	273
85-90.....	391
80-85.....	555
75-80.....	439
70-75.....	348
65-70.....	120
60-65.....	106
55-60.....	13
50-55.....	25
45-50.....	0
40-45.....	7
35-40.....	2
Total.....	2,390

These data show an upward trend of grades, with a median score of 81.2 per cent.

When the grades of the individual teachers were examined, wide variations in the distribution of grades were evident. Some of these teachers are very high markers, others low, while several strike a mid-point.

Grades are necessary in our present system of education, hence it is obvious that a plan or standard of marking should be adopted by schools and school systems.

Distribution of Grades

One of the most satisfactory systems of grading that has been devised, thus, far, is the commonly termed "five point system" based upon the normal probability curve. This method involves four passing grades and one non-passing grade. These grades may be represented by the letters A, B, C, D, for passing, and E for failure.

This plan places students' grades into groups. For example, all students ranking between 95-100 receive an A grade; those ranking between 85-94 receive a B grade, etc. Although the superiority of a grading system based upon the normal probability curve is generally conceded by educational and statistical authorities, there is, however, a difference of opinion regarding the distribution of the percentage of grades.

The following is an example:*

Authorities	Percentages for grades				
	A	B	C	D	E
Cajori	7	24	38	24	7
Dearborn	2	23	50	23	2
Rugg	3½	24	45	24	3½
George Washington University.....	4	24	44	24	4
Cattell	10	20	40	20	10
Meyer	3	22	50	22	3
Mendenhall	5	20	50	20	5
Smith	10	15	50	15	10

To the above distribution Eells suggests adding another, and states his position thus:**

"It is therefore recommended that the distribution of grades A, B, C, D, E, be in the approximate proportions of 6-22-44-22-6 per cents whenever it is desired to establish an ideal standard based on the assumption of normal distribution."

Of the nine plans, for the distribution of grades, listed above, it will be noted that A and E, the highest and lowest grades, range from 2 per cent to 10 per cent, respectively. This raises two questions: (1) Why should either an excess or a scarcity of high or low marks occur? (2) Why should students be graded?

To the first question, it may be said that an excessive number of failures may be due to poor teaching, improper classification, lack of interest or motivation. On the contrary, a large number of high marks may indicate a brilliant class, interesting subject matter, a high degree of pupil achievement, superior teaching, low standards, etc.

To the second question, the necessity for grades, the following reasons may be given:

1. Administrative uses.
2. To measure individual and group progress.
3. To acquaint pupils with their relative ranking within the group.
4. To provide data for comparison with other groups, classes, departments, and schools.
5. To furnish a basis for promotion.
6. To provide data for admission to college, other institutions, and employment.

Suggested Rating Scales

If a grading system is adopted it is necessary to devise a scale for grading purposes. This scale should be simple, brief, and concise. It should be capable of easy

* Eells, W. C. An improvement in the theoretical basis of five point grading systems based on the normal probability curve. *Journal of Educational Psychology*, 21:128-135. February, 1930.

** Eells, W. C., *loc. cit.*

SCALE A
FIVE GRADES OF STUDENT REACTION ARRANGED ACCORDING TO FIVE FACTORS

Factors involved	A student	B student	C student	D student	E student
1. Type of work	Always exceeds standards	Frequently exceeds standards	Just satisfies standards	Occasionally fails to satisfy standards	Seldom meets minimum standards
2. Amount of work	Always more than required	Frequently more than required	Just satisfies requirements	Occasionally falls below requirements	Usually falls below requirements
3. Attitude toward work	Always good	Usually good	Good when interested	Occasionally uninterested	Usually poor
4. Effort	Always to limit of capacity	Usually to limit of capacity	Just enough to satisfy requirements	Occasionally insufficient to satisfy	Usually poor
5. Dependability	Always in attendance and prompt with assignments	Seldom absent and usually prompt with assignments	Average attendance and occasionally fails to do assignments	Occasionally absent and often fails to do assignments	Frequently absent and usually fails to do assignments

interpretation by teachers, pupils, and patrons. There are listed two suggestive scales: (a) lists the factors involved in an A, B, C, D, or E grade; while (b) gives numerical weights to specific factors usually involved in giving a final shop grade.

SCALE B

WEIGHT OF FACTORS TO BE CONSIDERED IN GRADING STUDENTS

Factors to be considered	Weight of factors in per cent
Shop or laboratory: Quantity and quality of product produced	45
Classwork: Recitation, group participation, and discussions; written and oral reports.....	20
Quizzes and examinations.....	20
Effort; attitude; cooperation.....	15
Total score.....	100

Attendance, punctuality, and tardiness are to be considered. For example, if a course is weighted to a maximum of 500 points, it is suggested that 5 points be deducted from a student's grade for each absence, and 2 points for every case of tardiness. A student is tardy who fails to be in the classroom or shop when the signal sounds, denoting the beginning of the class period.

The weights given to the factors in scale B are to be considered flexible and not as something standardized, inflexible, and to be followed rigidly. It is suggested that a scale of this type be given a trial for a semester or two. At the end of this period it will be possible to estimate and evaluate its worth, and make such additions or deletions as may be considered necessary.

Recommendations

1. The adoption of a five-point group system of grading based upon and approximating the normal probability curve.
2. That a uniform system of grading should be adopted to avoid wide variations in standards and achievements.
3. That teachers, departments, and schools should survey and examine their grades and grading systems periodically.

Southern Agriculture News Notes

Future Farmers at Los Angeles County Fair.—Camp Condee, an encampment of high school vocational agriculture boys from the south, will be held this year on September 22 and 23 at the Los Angeles County Fair at Pomona. Last year the camp was organized for the first time, and was attended by 256 enthusiastic Future Farmers from various chapters located in the eight southern counties.

An encampment of this sort has tremendous educational possibilities. Exhibits at the Los Angeles County Fair represent some of the best dairy cattle, hogs, sheep, beef cattle, and poultry to be found anywhere in the West. The main building will be filled with agricultural products—fruits, vegetables, and flowers representing the highest degree of quality. In the farm mechanics tent will be displayed tractors, pumps, plows, and all modern mechanical equipment used in up-to-date farming practice. These materials are all available for a two-day laboratory for the high school students.

Judging contests, individual and group tours of the fair, and demonstrations will make up the bulk of the two-day educational program. However, there will be four assemblies that will be planned from a recreational and educational point of view. A leader in the field of agriculture will meet with this group of young farmers at each of these assemblies. The boys will be housed in individual tents and will have their meals served by a local caterer.

Ventura Future Farmers tour district.—Seeing is believing! This statement was readily believed by the 50 Future Farmer boys, representing the F. F. A. chapters at Ojai, Simi Valley, and Ventura, who, with their instructors, recently completed an agricultural tour of Ventura County. This tour was arranged by the County Farm Advisor, V. F. Blanchard, and his assistant, T. E. Merryweather.

An interesting visit was made to the Del Mar ranch of the Limoneira Company, and to the A. J. Thille ranch at Mound, both lemon demonstration orchards, where the boys were shown the results of recommended cultural practices.

The prime function of cultivation in orchards, including the method of ridding them of weeds, and the damages

done to soil texture by over-cultivation on heavy wet soils, was well demonstrated and explained at the walnut orchard of D. A. Tobias at Saticoy.

A stop was made at the dairy of P. M. Hendrickson in Saticoy, where cleanliness and sanitation was quite apparent. A stop was also made at one of the large fields of the Springville ranch of the American Beet Sugar Company of Oxnard.

One of the most interesting visits was paid to the successful poultry ranch of C. M. Rummell near Oxnard. Here the brooding, feeding, and management of chicks was emphasized. Particular interest was taken in this stop by the boys, since several of them are brooding chicks as their agricultural project this year.

Southern agriculture teachers meet.—On Saturday, March 19, the agriculture teachers of the southern region met at Chino High School. Mr. J. A. McPhee, chief of the Bureau of Agricultural Education, State Department of Education, and Dr. G. P. Clement, head of the agriculture department at the Los Angeles Chamber of Commerce, were the main speakers.

Mr. McPhee outlined certain policies which should be followed by the public school system during this critical period. Dr. Clement discussed recommended revisions in our tax system. Other routine business discussed was the date and place for the regional semi-final contests, and methods of improving project record keeping.

During the noon hour the regional public speaking contest was held to determine the winner that will represent this region in the state final contest to be held later. Representatives from the 17 high schools, offering agriculture under the state approved plan, were present at this meeting.

E. W. EVERETT.

Future Farmers Plan Summer Programs

Spring and summer months will bring a varied program of activity for the Future Farmers of America, an organization of high-school vocational agriculture students, with a round of judging and public speaking contests, field day events, and summer preparation for the fall fairs and livestock shows.

The principal single event of the coming months will be the state final judging contests in livestock, dairy cattle and poultry, at the California Polytechnic School, San Luis Obispo. The leading teams in these classes from each of the six regions in the state will take part.

Final contests were reduced this year to these three as an economy measure, eight contests having been held in the past. Livestock, dairy cattle, and poultry judging were retained as state final winners are annually sent east for national competition. The dairy cattle judging team from California's Future Farmers has won the national title three times in the last six years, the last two bringing the state much valuable publicity.

Semi-final contests in all eight forms of competition were held during the month of April. Three regions in northern California competed at Davis on Picnic Day, April 16, and the other three regions had individual eliminations during the month.

A higher quality of products, with probability of greater numbers of entries, looms for the fall show season. In addition to the county and district fairs, the Future Farmers will have extensive exhibits at the state fair at Sacramento, the South San Francisco Junior Livestock and Baby Beef show, and the Great Western Livestock show at Los Angeles.

Future Farmer orators had their opportunity at Fresno April 2, when the best from each of the six state regions competed. The winner was sent to Santa Fe, New Mexico, for the western finals in mid-April.

Teachers of high-school vocational agriculture are making plans to go to San Luis Obispo the latter part of June for the annual two-weeks summer session, for which nationally-known speakers have been secured; and for the annual conference to follow the summer course.

G. P. COUPER.

Ag Teachers Concentrate on Definite Topic

A more or less new type of regional meeting is gaining considerable favor among agriculture teachers of the Sacramento Valley region. The former practice had been to conduct these meetings over a rather wide field of topics and teaching methods, with the result that one left the meeting without any very lasting impression of accomplishment at the meeting.

The new type of meeting at Chico concentrated entirely on one subject—the subject of poultry industry. Specialists in poultry production and marketing were present to discuss all phases of the poultry business. A specialist in agricultural mechanics was at hand to discuss “poultry mechanics.”

Agriculture and agriculture mechanics teachers, it is felt, must have a common problem in order to work together advantageously. This common problem is to make poultry projects and poultry raising in their community more successful.

Is this a good time to go into the poultry business? If so, how? were the two questions that this meeting sought to answer.

A. G. RINN.

The Voice of the Future Farmer

The California Future Farmer, Volume 1, No. 1, appeared in March as the official organ of the California association of the Future Farmers of America. George P. Couper of the California Polytechnic School, San Luis Obispo, is the editor, George Woolsey of Redding is associate editor, and C. O. McCorkle of Red Bluff is manager.

The cover page of this first issue carries a picture showing a group of Gridley Future Farmers who have repaired a power-drawn plow. News items of the activities of Future Farmers in the various sections of the state cover the North Coast, Sacramento Valley, Central Region, San Joaquin Valley, and the Southern Region. The paper is interesting and well set up and should prove most valuable in unifying the interests of the Future Farmers of the state.

Home Economics Groups Hold Conferences

The Bureau of Homemaking Education of the State Department of Education, for the school year 1931-32, has organized a series of small group conferences covering the entire rural area of California. In this area over five hundred teachers of homemaking subjects will be given an opportunity to participate in the discussion of their local problems. Twenty-seven of these Saturday conferences, well distributed geographically, have been planned. The chief of the bureau and four assistants are acting as leaders of these conferences.

During February and March conferences were held at San Luis Obispo, Redding, Taft, Riverside, Richmond, Merced, and Santa Paula. During April and May conferences will be held at Colusa, Modesto, Glendale, Marysville, Visalia, Santa Barbara, El Centro, Sacramento, San Diego, Ukiah, Fresno, El Segundo, Santa Ana, Alturas, Alhambra, Eureka, San Jose, San Bernardino, and Santa Rosa. The teachers invited to attend these conferences come from schools in which no special supervision is provided.

The bureau plans to hold a conference of city supervisors of homemaking education, and one or two conferences for heads of homemaking departments in high schools in which other supervision is not provided.

MAUDE I. MURCHIE.

RECENT PUBLICATIONS

Crawford, A. B., and Clement, S. H. The choice of an occupation. Department of Personal Study, Yale University, 1932. Price, \$2.00 paper; \$3.00 cloth.

Davis, Anne S., and subcommittee. Vocational guidance: report of the subcommittee on vocational guidance of the Whitehouse conference on child health and protection. Century Company, 1932. Price, \$3.00.

Menge, E. J. v. K. Jobs for the college graduate in science. Bruce Company, 1932. Price, \$2.00.

Ricciardi, N., and Kibby, I. W. Readings in vocational education. Century, 1932. Price, \$3.00. See review elsewhere in this issue.

San Francisco Public Schools, Bureau of Attendance and Guidance. The dental hygienist. San Francisco, Board of Education, 1932.

California, Department of Education. Continuation education in California, 1930-31. Sacramento, State Department of Education, Bulletin no. 6. March 15, 1932.

Ricciardi, N., and Kibby, I. W. Readings in vocational education. Century Company, 1932.

"This book reviews the literature of industrial and trade education and provides the reader with selected excerpts from the field of vocational education," says Dr. C. A. Prosser, in his introduction to this volume. He adds:

"Such a book is distinct contribution to the cause. In the past, the charge has been made, with a considerable degree of truth, that vocational educators did not read enough and were not acquainted as they should be with the history, the special objectives, the special problems, and special principles, and the special pedagogy of the kind of education which they were promoting and conducting. Truth to tell, there has been in the past very little to read, and even this was not available to the

ordinary reader. Most of the real literature of industrial training has been developed during a few very recent years. Most of us are just becoming conscious of the existence of that literature, and of its essential soundness." . . .

"The time is ripe for this, the first attempt to select and interpret the literature of the past and to suggest the sources to which we may resort for more extended study. It is a service which must be rendered not once but numerous times in the coming years as new and better material appears; as we gain wisdom by experience; and as industrial training adapts itself to the changing conditions; to the changing demands on workers and to our widening vision of the real purpose of education.

"This book should be found useful by all readers interested in or engaged in vocational education and particularly in trade and industrial education. It can be used effectively in courses given to prospective secondary school teachers, and in courses designed for secondary school administrators—as well as in courses for vocational teachers and vocational supervisors. It is particularly well adapted to summer session courses for educators. There is also a growing interest in university extension work where the book may be used as a basic text or guide."

AVAILABLE PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION

OF THE UNIVERSITY OF CALIFORNIA AND OF THE
STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
- No. 5. Bulletin No. 4. An Analysis of the Work of Juniors in Banks. May, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 17. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High School Students. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

CALIFORNIA VOCATIONAL NEWS NOTES

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No. 1

Vocational Guidance and the University Radio Service

By EDWIN A. LEE

Director, Division of Vocational Education, University of California

The University of California Radio Service is carrying on during the current year a most interesting and significant experiment in vocational guidance. Under the general supervision of the writer there began, on September 28, a series of discussions dealing with the topic "Vocations for which the University of California offers training." The response to the series is already such that it appears certain that the program may become a permanent part of the radio service.

The series is definitely pointed toward high school and junior college students. All over the state at 9:45 o'clock each Wednesday morning, in some places in small classes, at others in general assemblies or groups of classes, young men and women are listening to authoritative discussions concerning the vocations for which one may secure training at the University. Authority is guaranteed when such leaders as Professor W. C. Perry, director of the School of Architecture, discusses architecture; Dean G. S. Millberry, dentistry; Dean H. F. Grady of the College of Commerce, foreign trade; and Professor B. M. Woods, chairman of the Department of Mechanical Engineering, aeronautical engineering, to mention but a few of those who have already spoken.

The problem of selecting the vocations to be discussed was not simple. It is not generally recognized that there are approximately one hundred vocations for which one may be trained at the University of California, ranging from architecture to zoology. So far as feasible the desires of listeners are controlling our decisions. It has also seemed wise, despite the fact that the series deals with vocations on the level of university training, to include a certain number of discussions concerning vocations for which training may be secured in the high schools and junior colleges of the state. In these addresses which will be given from

time to time during the year, we will have the cooperation of the Commission for Vocational Education of the State Department of Education.

The reader may be interested in knowing the bases on which vocations are chosen for the weekly discussions. There are eight different questions which are applied to each vocation. Not all of the hundred for which the University trains rate highly in the list. Those for which the answer is uniformly yes are the vocations which are included in the group from which is selected the specific vocations to be broadcast each Wednesday.

These are the questions:

1. *Is there a wideness of appeal?*
Aeronautical engineering rates an unqualified yes to this question.
2. *Is there possibility of future development?*
Dentistry, for example, satisfies this question.
3. *Is the vocation largely unknown but rich in opportunity?*

Criminology represents a group that this question uncovers.

4. *Are the conditions of employment favorable?*

The overcrowded vocations generally, though not all

ways, draw a negative answer to the question.

5. *Is there a need for well-trained workers in the field?*
Law, for example, despite its overcrowding, is a vocation in which there is great need for well-trained practitioners.

6. *Is the training offered at the University adequate?*
There are some of the hundred for which training is not not adequate. Such will not be discussed in the series.

7. *What is the social importance of the vocation?*
Practically all vocations for which the University offers training are socially important to a degree. Those which rate highest, other things being equal, are chosen for broadcasting.



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8. Is there accurate information available concerning the vocation in terms of the above questions?

This question is really of secondary importance, but in border-line cases may be the deciding factor.

The Division of Vocational Education is eager to help any high school or junior college which wishes to supplement the radio broadcasts with a curricular program. There is no problem which calls for clearer vision on the part of principals and presidents than the problem of adequate vocational guidance. It is the hope that the University of California radio programs will stimulate a live and continuous interest throughout the state in this most fundamental aspect of secondary education.

Vocational Rehabilitation Grows During Depression

By H. D. HICKER

Chief, Bureau of Vocational Rehabilitation, State Department of Education

Since the establishment of the service in 1921, vocational rehabilitation has conclusively demonstrated that it is entirely feasible and possible to adjust disabled persons to suitable vocations and thus insure their economic independence. Surveys and reviews on file indicate that the procedure of vocational counseling, training, and placement (supplemented by special services necessary in any given case) followed by the Bureau of Vocational Rehabilitation has resulted in at least 80 per cent success from even the challenging standpoint of permanency of attained status of self-support.

Since 1921, 6,860 residents in California have profited directly by the service, including 2,272 disabled persons fully rehabilitated, with 2,444 dependents, and 2,144 other disabled persons aided but not technically rehabilitated. The value of the service to society as well as to the individuals aided cannot be questioned. The people of the state are amply repaid for the extremely small investment required to reclaim these vocationally handicapped persons, amounting to approximately \$325.00 per rehabilitant, half of which is paid by a Federal grant in aid. The basic principle of the right of the disabled to equality of vocational opportunity is also generally accepted.

Taking as conceded, therefore, the value and efficiency of the vocational rehabilitation service in general and under normal conditions, the question may still be raised as to how it functions in times of economic stress and widespread unemployment. The experience of the past three years affords a valid basis for answer to such a question, and a review discloses a number of interesting facts. Trends are indicated in the following table of comparative figures for the past three bienniums:

Status	1926-28	1928-30	1930-32
Live load at close of biennium.....	577	633	1123
In school training.....	464	482	839
In employment training.....	30	27	55
In other preparatory status.....	0	44	50
Awaiting employment	00	0	93
In employment being followed up.....	83	80	86
Rehabilitated during biennium.....	445	501	496

It will be seen that current live load is nearly double that of two years ago. (By October first it had increased to over 1200.) This rapid increase and an analysis of information contained in applications received during the depression period, indicate that:

One More State Adds Continuation Education

Several years have elapsed since a state has placed continuation education on its statute books. Florida was the last to do so and now another southern state, Louisiana, has enacted legislation permitting the establishment of continuation schools for children between the ages of 14 and 16 who have working permits. At the same time the compulsory school attendance age was raised to 16 years. It is encouraging to see a state raise its educational standards in the face of the present economic conditions.

1. Large numbers of untrained partially disabled persons managed to get and hold jobs calling for little skill in times when the demand for labor is good, but are quickly forced out and find themselves unable to compete with the able-bodied in a falling labor market. Many of these realize the need of becoming skilled in vocations suited to their physical condition and welcome the opportunity for training offered by the Bureau of Vocational Rehabilitation.

2. Other disabled persons who were skilled and employed on suitable jobs are the victims of "technological unemployment"; most of these seek re-training for vocations in which employment may be expected when times improve.

3. The Bureau is almost the sole recourse of the handicapped who seek employment in such times. Employment agencies give them no consideration or aid.

Attention is next called to the fact that the number of rehabilitations during the past "depression" or biennium (496) is nearly equal to the number for the previous or a "good times" biennium, and to the further fact that 93 persons had finished training and were awaiting placement at the close of the biennium. These facts indicate that:

1. Disabled persons thoroughly trained for suitable vocations in which there is even a restricted labor demand can be successfully placed in competition with the able-bodied.

2. Placement is much more difficult than in normal times and the persons trained are absorbed in industry only gradually.

The picture as a whole is one of successful functioning despite the current depression. The Bureau is getting its share of available jobs for its disabled trainees who might otherwise be found in the bread line. This is as it should be, for a man with an amputation, for instance, can get just as hungry as anyone else and can feel just as keenly the distress of seeing his family hungry; whereas when properly trained he is just as valuable to an employer as anyone else and is entitled to equal opportunity to work.

Moreover, the Bureau is meeting a real need and demand for vocational training. It enables disabled persons to spend the dull period in profitable preparation for better times to come, and therefore not only benefits the persons trained, but also helps to stem the rising tide of discontent and social malaise. That the demand for rehabilitation service is greater than can be met with present resources is an indication that the service is valued and appreciated by the disabled persons who so vitally need such help.

Continuation Education Shown at State Fair

"What is taught in continuation schools?" is the question which was answered in the recent exhibit of continuation-school work at the State Fair. Although the Educational Department of the State Fair (officially called Public School Industrial and Vocational Contest) has exhibited the work of high schools, junior high schools, and elementary schools for 17 years, the contest has been opened to continuation schools for only four years.

To the Sacramento Continuation High School belongs the credit for initiating the continuation-education exhibit. For three years they took the responsibility of building up the exhibit, making the booth, placing the exhibits, furnishing the attendants and, finally, packing and returning the material to the continuation schools.

Aid Given by State Department of Education

This year the State Department of Education contributed a sum for the building of a booth, and for certain supplies and labor connected with it, but the staff of the Sacramento Continuation High School continued to help with the placing of the exhibits and the care of the booth during part of the day, and for the final storing of the properties acquired. The gratitude of the whole California Continuation Education Association is due Sacramento for its contribution to this project. Appreciation is due, also, to Mrs. Jane Amundsen, superintendent of the vocational department, California Agriculture Society, who has been most kind in showing the continuation-school exhibit every possible favor.

The State Fair Committee, which was appointed by Superintendent Kersey, consisted of the following members: Katharine S. Cox, E. R. Snyder Continuation High School, San Diego.

Virginia R. Hubener, San Francisco Continuation High School.

Margaret G. Lomax, San Jose Continuation High School.

Will C. Mathews, Central Trade School, Oakland.

H. N. McClellan, Berkeley Public Schools.

A. E. Paine, Huntington Park Opportunity School.

Grace G. Palmer, Ontario Continuation High School.

J. I. Wallis, Sacramento Continuation High School.

F. C. Weber, Metropolitan Continuation High School, Los Angeles.

Agnes S. Wolcott, Long Beach Continuation High School.

Emily G. Palmer, Research and Service Center, University of California, chairman.

Entries and Prizes

Seventeen continuation-high schools responded to the request for projects for the 1932 State Fair, sending from one to 50 articles each, making a total of about three hundred projects exhibited. The trophy for the most varied exhibit went to San Francisco. On the basis of the number of first

and second prizes won, Sacramento received first sweepstake, San Francisco second, and Los Angeles, third.

Publicity

The space assigned to the continuation-education exhibit in the Grandstand Building was one of the choicest locations on the fair grounds, and was available to the thousands of people who went to and from the horse races in the daytime, and the fireworks displays at night. It is estimated that 8,000 people gave the continuation-education exhibit



CONTINUATION EDUCATION BOOTH, STATE FAIR, 1932

some attention, and that hundreds of people read the notebooks, as well as looked at the other projects. The front of the booth had a slanting counter, two notebooks deep, and about 40 feet long. The hundred or more notebooks were almost worn out by the people who passed and stopped to read them. Many people asked about the instruction given in continuation schools, and the notebooks made it possible to show them.

Job Information

One of the most interesting studies in the exhibit was made by Peter Saputo, a seventeen-year-old boy who was employed in a shoe repair shop. His display of the materials used on his job included an exhibit of the different kinds of leather used for uppers, dyed in various colors; an exhibit of the various kinds of sole leather, and the part of the hide from which the first, second, and third best sole leathers are taken; a study of the tanning of leather; an exhibit of the machinery used in the shoe repair shop; and, finally, a section entitled, "Eight things which the customer likes."

A study of period furniture made by a girl preparing to become a salesperson in a furniture store, a study of condiments and spices by a boy employed in a grocery store, a study of child development and care by a girl employed in taking care of a young child, a study of personal care and

hygiene by a girl employed as a waitress, a study of the rules and regulations affecting messengers by a boy employed by the Western Union Telegraph Company illustrate the type of notebook projects sent to the Fair. About one hundred notebooks were in the exhibit.

Job Skills

Other projects were displayed inside the booth, illustrating the skills taught in the continuation schools of the state. Mimeographing, and office routine projects; a drill press, a soldering iron, a battery, a re-wound armature, a cement block bearing house numbers for the lawn, tools, sketches, blueprints, various types of wood work, and even a canoe; dresses from new material, remodeled garments, underwear, children's clothing, and household staples; wall hangings, hand-woven articles, and rugs; block prints, posters, designs, magazine covers, and numerous art-craft articles were among the exhibits displayed.

The recognition of pupils' efforts in acquiring useful skills, or in securing useful information on some phase of their jobs, the suggestions afforded teachers who visited the exhibit, and finally, the publicity for continuation schools seems to have made the undertaking one of great value to the whole program of continuation education, and helped to answer that frequently asked question, "What do pupils learn in continuation schools?"

Cooperative Supervision

By ALBERT E. BULLOCK

Director, Division of Commercial Education
Los Angeles City Schools

During the past year or two, supervision in the public schools has, to use a current phrase, been "put on the spot." Some cities have dismissed practically their whole supervisory force, while many others have cut to the quick. There are those who advance the argument that since the present-day teacher is so highly trained, supervisors are no longer necessary. They think that the extent of a supervisor's activity is classroom visitation. As a matter of fact, this activity is only one link in this chain of duties.

It is true that a supervisor can do little by himself to aid the teachers, principals, and others engaged in the work of the schools, just as a teacher can do little working by himself in establishing norms of accomplishment, in comparing the results of his methods with those of others, in securing needed changes in the course of study, etc. What is needed is an understanding on the part of every one of what the right kind of supervision can do to make the educational program more effective. A program of supervision in commercial education cannot be successful unless the teachers are successful; its whole purpose is to help the teacher, to improve commercial education, or to help retain advantages already gained.

The Purpose of Supervision

In its original sense supervision undoubtedly meant oversight in the sense of inspection. Later the idea developed that supervisors should not merely inspect teachers but should help them do better teaching; thus, the scope of supervision was extended to include the training of teachers in service. Recently the idea has grown up that supervision is only serving its purpose when it is influencing

every one in the school system to strive constantly to become stronger, more useful, and more efficient.

This contemplates the cooperation of many people in different levels of the educative process, from the janitor, who is responsible for the condition of the plant, to the superintendent, who decides upon the general policies to be followed. It might be well, therefore, to examine the duties, responsibilities, and opportunities of all those concerned with instruction, and indicate their relation to supervisors and supervisory service.

The superintendent of schools is the responsible administrative and supervisory expert in the school system. An effective program of supervision, therefore, necessitates a clear-cut delegation of responsibility by the superintendent of schools to his assistants in terms of clearly defined functions.

The principal, as the executive head of his school, is directly responsible to the superintendent of schools for the educational results achieved in the school. As principal, he is responsible for its organization, administration, and supervision. The intelligent adaptation of the policies of the superintendent of schools to meet the needs of a school should rest with the principal and his teaching staff. Co-operatively, principal and teachers should organize and execute the educational program of the school. The entire staff in the school should strive to utilize the expert guidance and help which special supervisors should give.

The special supervisor, as the expert or coordinator in his particular field of educational service, should be the technical advisor of the superintendent, assistant superintendents, and principals. The activities of the supervisor are primarily: (a) studying teaching and learning conditions; (b) conducting research necessary for finding ways and means of improving these conditions; (c) aiding the persons directly engaged in guiding and improving learning. The supervisor, then, is a special counselor of the superintendent and principals—an authoritative specialist employed to assist constructively in the improvement of teaching.

The teacher, as the executive of the instructional program in his classroom, is directly responsible to the principal (and to his head of department as the principal's agent) for the results obtained, and through him to the superintendent of schools. Since the guidance of pupils in their growth rests upon the teacher in the last analysis, he must be encouraged to make every effort to improve his teaching and to utilize every available means which can further his improvement or assist in bettering conditions for more active learning by the pupils.

Every person employed in a school system in any non-teaching capacity, serves the sole purpose of assisting the teachers expertly and constructively in improving teaching and learning conditions. Research assistants, assistant superintendents, school nurses, clerical workers, janitors, and all other employees not engaged directly in teaching, or the supervision of teaching, are there to facilitate the work of the teachers and the supervisory officers.¹

It is apparent that the supervisor can accomplish practically nothing without the cooperation of all concerned—teachers, principals, and superintendents. This idea of supervision is quite universally recognized in late literature on supervision.

¹ Kyte, George C. How to supervise. Houghton Mifflin Company, 1930. Chap. 3.

The Functions of Supervision

It is well, however, to state in some detail the functions of supervision, for no effective program can be formulated without such a statement. In the Eighth Yearbook of the Department of Superintendence, entitled, "The Superintendent Surveys Supervision," these functions are well set forth and analyzed. These clear statements and careful analyses are a real contribution to the study of supervision and the writer wishes to acknowledge his use of them in much of what is to follow.²

Fundamentally, the functions of supervision are either creative or directive. They have been variously grouped by experts in the supervisory field, but for the purpose of this analysis they may be classified under the following captions: (1) inspection, (2) research, (3) training, and (4) guidance.

Inspection—A Function of Supervision

Inspection has come to have a very sinister meaning because of its use, in the early days of supervision, for the sole purpose of grading the teacher. As used in this analysis, however, inspection has a much broader meaning. It includes "the survey of classroom teaching and the school system as a whole, the equipment, the means of instruction, the service, the personnel, the pupils, or any other items of detail, in order to ascertain how efficiently instruction is being given. The means of securing information may be by visit, by general report, or by measurement. Detailed information relative to present attainments is essential to future progress. . . . Standard tests, rating schemes, and various objective devices are now available to teachers and supervisors who desire more exact information about instructional conditions. . . ."

"Effective inspection should reveal defects in instructional procedure as well as points of particular excellence. Data gained through inspection may form the basis of a corrective or constructive program or may merely indicate what progress has been made in response to previous constructive effort. Through inspection, the supervisory agent should be able to diagnose conditions and discover problems which press for solution.

Research—A Function of Supervision

"Research is a systematic critical investigation seeking facts or principles. Its purpose is to discover, clarify, and isolate problems; to collect, organize, and interpret facts; to formulate hypotheses, and to test them and appraise their value. Research is a creative function. If it may be assumed that true progress must come through a knowledge of facts scientifically obtained, then all curriculum construction and revision, and all improvement in materials, techniques, and methods of instruction must be the outcome of research. Only through this means can we evaluate the instructional process, keep it responsive to social needs, and in harmony with the growth of scientific knowledge."

It is the province of research "to discover opportunities for improvement in materials and methods of instruction; to collect, digest, consolidate, and publish valuable data; to experiment with methods and materials of instruction which appear to be better than those in use; to measure results; to set up tentative standards and objectives; and

to formulate the results of investigations in such definite and practical terms that administrators and directors of instruction can use them.

Training—A Function of Supervision

"The effective exercise of the functions of inspection and research in any system should yield a product of materials, techniques, and methods which will form a valid basis for the exercise of the third function—training. The term training is here used in a broad sense. In the performance of the training function, the supervisory agent places his expert knowledge, power, and skill at the service of any person in the system who is attempting to carry out the instructional policies of the administration. This assistance may be from superintendent to principal, from principal to teachers, or from supervisors to teachers, principals, and other administrative officials.

"The training program concerns itself with keeping the personnel informed and practiced in best educational procedures.

"An important prerequisite of progress is the development of a favorable attitude of mind on the part of those concerned directly with the problems of administration and instruction; an attitude responsive to change; a state of mind hospitable to new ideas and methods; a willingness to cooperate in utilizing the creative contributions of the system. With such a favorable background, improvement in instruction only awaits the creative and constructive effort of those who have the vision and knowledge to promote a forward-looking program. Without it, a program of improvement although scientifically planned and intelligently presented, will progress but slowly.

"In practice, training may take the form of: (1) conferences with individual teachers during which there is free interchange of ideas and analysis of individual problems; (2) meetings with experimental groups of teachers selected for their creative ability; (3) group meetings of teachers for the observation and discussion of demonstration lessons; (4) visits to classrooms, preferably on invitation, for the purpose of diagnosing difficulties and making suggestions. The ideal supervisory agent visits teachers avowedly as a service agent, ready to aid, to guide, and to encourage rather than as one who comes to criticize, to censure, and perhaps to rate; (5) the distribution of instructional aids such as bulletins, type lessons, and references for reading and study; (6) the organization of extension classes to supplement other training procedures. Every forward movement in a school system necessitates a readjustment in the viewpoint and methods of teachers. For this reason, formal classes for training are desirable in which teachers in service as well as prospective teachers may broaden their professional outlook and harmonize their theories with changes which are going on in education.

Guidance—A Function of Supervision

"After the materials, techniques, and methods of instruction have been evolved through experimentation and research, and supervisors, principals, and teachers have been made familiar with them through the various training agencies just discussed, there remains the fourth function—guidance. Research and training programs must produce an outcome in the form of better instruction. That this result may be realized, some agent or agents must assume the guidance of instruction. These agents, usually

² Eighth Yearbook, Department of Superintendence. The Superintendent Surveys Supervision. Department of Superintendence, N. E. A., 1930. P. 15.

the building principal and counselor, and in some cases or for some purposes, the supervisor or head of department, must provide the materials, physical setting, and guidance prerequisite to effective classroom work. In the performance of this function, these persons supplement a teacher's previous training: (1) by providing him with special information relating to his immediate problems; (2) by furnishing him suitable materials for instruction; (3) by helping him to measure the achievement of his pupils, to diagnose their difficulties, and to apply suitable remedies; (4) by supplying standards by which he can judge his own efficiency; (5) by diagnosing his failures; (6) by suggesting remedial measures; (7) by appraising his final success or failure. The exercise of the guidance function is necessary if the teacher in the classroom is to attain and hold the advanced ground for which research and training have paved the way.

"Additional functions which aid in the improvement of instruction.—Supervisory officials are frequently called upon to assist in the selection of textbooks, in the preparation of standards for the purchase of supplies and equipment, and in the planning of buildings. Such activities, while not readily classified under the captions used above, are related in an important way to the problem of instruction and, if properly carried on, may be an aid in improving instruction. It would seem that supervisory officers may with propriety be asked to carry on the researches necessary to the scientific formulation of standards for textbooks, equipment, supplies, and buildings, but that the actual decisions as to these matters is an administrative function and should be performed by an administrative officer."

It will thus be seen that every one has a definite part in our educational scheme and that the program cannot be complete unless each person does his part.

Adult Education Holds Conferences

The Division of Adult and Continuation Education of the State Department of Education recently completed a series of four regional conferences with approximately one hundred and fifty local administrators of adult education. Meetings were held in Oakland, Fresno, and Los Angeles for the north, central, and southern sections of the state with an extra conference for the Los Angeles evening-school principals. The entire program of each conference which was carried on for either four half-days or three full days was set up on a forum discussion basis. A final composite report of the four conferences will be available soon. The conferences were devoted to the following topics:

The Aims and Purposes of Adult Education

Due to the scientific demonstration by Thorndike and others that the power to learn is still present in adulthood, and that increased life experiences make possible a deeper, fuller appreciation and a more rapid absorption of new knowledge with greater understanding, it is becoming commonly accepted by both laymen and educators that the education of adults for adulthood is in many respects more fruitful and more economical than education of persons at any other stage of development.

The acceptance of this point of view has resulted in the demand of over 300,000 adults in California for educational service from our public schools. This is forcing upon school

administrators the realization that the real educational needs of these adults must be determined upon the basis of contemporary life needs and that the present secondary educational program for adolescents is not adequate for their parents. A casual examination of what has motivated the large group to enroll in our special classes for adults indicates such purposes as: preparing for employment in a new occupation; training for greater security or advancement in the present occupation; desiring to keep abreast of the times; knowing and understanding better the social and economic changes that are taking place; remedying a neglected educational opportunity in youth for at least a high school education; developing skill and appreciation in certain activities for the enrichment of adult life and the greater enjoyment of leisure.

Adult Vocational Education

One full day was devoted to a discussion of what constituted an occupational extension program for adults. During the present economic depression a well defined need has developed for the retraining of many adults who have been displaced by important changes in industry. These same changes are forcing upon the worker who would remain in his present field of work the necessity of improving himself by learning new processes and methods of his occupation. Industry formerly offered this service to old workers but because of the keen competition for the reduced business available today, they are insisting that the worker secure these new skills and technical knowledge elsewhere. Thousands are coming to the public schools for specific help to enable them to earn a livelihood. While this condition is particularly true in industry, it is also true to a great extent in the fields of agriculture and business.

Social-Civic Problems

Evening schools have long been a part of the public education program of California. Educators for the most part have looked upon these schools as an opportunity for adults to complete a general education denied to them in youth. This conception is gradually giving place to a realization that social and economic changes are forcing upon the adult the necessity of a better understanding of these changes if he is to discharge intelligently his responsibilities as a citizen in our democracy. This problem can not be remedied through the better education of children, but must be met with the group responsible for the solution of these intricate problems at the time they arise.

A new curriculum must be developed that will create in the citizens of every community an active appreciation of, and a critical attitude toward the society in which we live. This can be done only through the discussion of current social problems under the leadership of one who will assist them in the process of analyzing their problems so that not only is there developed a better understanding but also that understanding is carried over into a more intelligent participation in the affairs of the community, the state, and the nation.

Administrative Regulations

The conference closed with a discussion of the regulations governing the establishment and operation of an evening high school for adults. A detailed account of these technical provisions is to be found in the final report of the conferences.

L. B. TRAVERS.

Vocational Teacher Training at U. C. L. A.

By BENJAMIN W. JOHNSON

Assistant Director, Division of Vocational Education, University of California at Los Angeles

A comparison of enrollment figures in the vocational teacher-training classes at the University of California in Los Angeles for the summer sessions of 1931 and 1932 is of interest. The total enrollment in 1931 was 245, distributed in eleven different courses. The past summer the same offering of eleven courses was maintained in spite of a 20 per cent reduction in the budget; the enrollment, however, dropped to 216. The percentage of loss was largest in the beginning teacher-training classes, which was to be expected in view of the diminishing opportunity for placement of vocational teachers. The decrease in enrollment compares with the decrease in the summer school as a whole, however. It is apparent that the teachers who have undertaken training the past two years are continuing to complete their work, as the enrollment in the advanced groups was about the same as in the previous year.

The summer session was glad to welcome to the south a number of teachers who had begun their work in Berkeley. Owing to the necessity for economy, the basic teacher-training courses were not offered in Berkeley the past summer. Although this worked some hardship upon those affected, those who came were generous in expressing their pleasure and satisfaction in the contacts made here.

The six-unit course in analysis and organization of trade technical curricula, usually spoken of as the "related-subjects course," was well attended. There were enrolled ten women and twenty-two men, representing fifteen different trades. The course was better organized this year than heretofore, and, in addition to a quantity of splendid teaching material that was developed, a better conception was had of the significance of this work in trade teaching and of the importance to the shop teacher of being able to master the related work and teach it in addition to his shop courses. It is in the related subjects that the principles of growth and progress can be especially emphasized. The craftsman of today must be able to advance with the change taking place in his craft.

Courses for Firemen

There was one group in the summer session unique in its organization. Thirteen officers (captains and battalion chiefs) from the Los Angeles Fire Department were sent to take the first-year units in teacher training. These men were assigned to Mr. Johnson's section, as he had conducted a short training course for firemen the previous year. As a result of this earlier experience Chief Scott and the staff of the Fire College selected these men with special teaching assignments in the department to take the regular teacher-training course and better equip themselves to teach in the Fire College the coming winter. They were an exceptionally fine lot of men, highly proficient in the special departments that are recognized as important divisions in fire prevention and control. As evidence of the high regard in which this training course is held, the Fire Department paid the tuition of these men, their incidental expenses for books and supplies, as well as assigning them on company time for the six weeks' work. Chief Scott firmly believes in education for firemen and believes that firemen taught by expert firemen who are also trained in teaching methods will be a big saving to the city.

One incident confirming this belief was noted recently. A group of captains attending the Fire College are taking the revised course in "Care of Quarters." Although these men had long ago learned about the care of quarters by the "pick-up method," they learned much that was new in the course given. This was evidenced by a report from the supply department at the close of last month showing that requisitions for supplies had fallen off some \$300.00 due to improvement in the use of supplies and in the care taken in ordering them.

Police Training

Some work was done by this division last spring in co-operation with the Police Department. A group of some 25 executive heads and unit commanders were given a short-unit course, similar to that offered the firemen, to assist them in their teaching. This special course in teacher training was made possible by the excellent preliminary work done by L. G. Stier, assistant supervisor of vocational education for the Los Angeles public schools, in a series of conferences with these executives, dealing with their responsibility for a training program for policemen. The Police Department already has a Police School operated in connection with the Los Angeles evening schools in which about 14 of the men who took this course are this year teaching various units in which they are expert.

Mr. George Mann, director of vocational education for the Berkeley public schools, was assigned during the past summer by Mr. J. C. Beswick, of the State Department of Education, to make a complete analysis of the various departments of police service with a view to determining a more adequate vocational-education program. This analysis has been completed and it is expected that further developments will follow.

Fall Teacher Training Under Way

The enrollment in trade teacher-training classes in Los Angeles for the fall term is less than a year ago. This is in accord with the policy agreed to, as no encouragement is given at this time to the many people applying for credentials in the vocational field. The beginning group, with an enrollment of 20, is less than one-half the number starting a year ago. The advanced group, most of whom are already teaching, are 32 in number. There is also a group of 18 in a university extension course meeting Saturday mornings under the direction of Mr. George Wright, taking the six-unit course in related subjects.

The depression has resulted in a large increase, during the past year, in the number of people making inquiry concerning vocational teaching. Never have there been so many high-grade craftsmen and men with technical and engineering training seeking to enter the teaching profession.

Evening School Instruction

Due to a change in policy in most of the school districts in this vicinity, making it impossible for one person to have more than one full-time teaching assignment, there has been an unusual placement of trade teachers in evening schools. Fifty-three emergency credentials have been issued

(Concluded on page 11)

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Continuation Education Homemaking Education
Civilian Vocational Rehabilitation
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STATE DEPARTMENT PROVIDES FOREMAN TRAINING

The Commission for Vocational Education of the State Department of Education has instigated and is promoting at the present time special activities of interest to voca-

tional educators. Mr. J. F. Baker, an experienced fire protection officer, has been employed to organize conferences for the officers of volunteer and paid fire departments in various communities throughout the state who wish to avail themselves of this opportunity to lower their fire hazards through training and upgrading of the fire-fighting personnel. Mr. Baker was formerly connected with the training school which was organized and conducted by Chief Scott of Los Angeles Fire Department. While instructor in this school, Mr. Baker also attended and completed the entire teacher training course conducted by Mr. B. W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles. This training activity of the State Department of Education is receiving the full support and cooperation of state fire marshal, Jay W. Stevens.

For the most part Mr. Baker will utilize the conference method in his training work. His first conference started October tenth with a full officer personnel of the Sacramento City Fire Department. Upon completion of his work in Sacramento he will take up his training work in some other community.

Mr. John C. Beswick, assistant executive officer of the Commission for Vocational Education, has been assured by representatives of the fire underwriters and civic officials of the state that this work should ultimately result in an annual saving to the state from the ravages of fire in amounts running into millions of dollars.

The State Department of Education is also carrying forward the work which was started a little over a year ago in cooperation with the Division of Vocational Education of the University of California in the upgrading of school custodians and janitor engineers. At the present time the work is being organized by Dr. B. E. Mallary and consists of building a training organization out of the instructed personnel developed during the past two summer sessions at Berkeley. Through the cooperation of the county and city superintendents of schools it has been possible to organize technical institutes for school janitor engineers during the annual teachers institutes. Marin and Sonoma counties were the first to announce such institutes and were followed by Solano and San Joaquin counties. Other counties have signified their intention of holding such institutes. These institutes are held one or two days of either eight or sixteen hours. Provision will be made to offer training beyond the minimum period at some future time.

In addition to the technical institutes several counties are interested in bringing their school custodians together in evening trade-extension classes. Vallejo has started such a class conference under the leadership of John Alltucker. Other cities in the northern part of the state, namely, Berkeley, Oakland, and San Jose, are continuing the trade extension classes which they started last year.

It is the intention of the State Department to promote foreman instructor training in those industries of the state that wish to avail themselves of this necessary phase of industrial training. On October 14 such a conference was organized at the Simmons plant in San Francisco. This is the Pacific Coast plant of a large company manufacturing beds and mattresses. This conference is being conducted by Dr. Mallary.



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C. V. F. Holds Annual Meeting

The annual meeting of the council of the California Vocational Federation was held in San Luis Obispo, Saturday, September 24. Dr. B. R. Crandall, president of California Polytechnic School, and members of his faculty were hosts to the visiting delegates and made arrangements so that every session of the all-day meeting was held on the school campus.

Of interest to all vocational teachers of the state is the list of officers elected to serve during the present school year. They are listed above.

The morning session was called to order early by President Smith, and was addressed by Robert L. Bird, superintendent of schools, San Luis Obispo County; John C. Beswick, chief of the Bureau of Trade and Industrial Education; L. B. Travers, chief of the Division of Adult and Continuation Education; and H. D. Hicker, chief of the Bureau of Vocational Rehabilitation.

Mr. Bird explained that he was in attendance partly because of his interest in vocational education, and partly because the meeting was being held in the county in which he is superintendent of schools, but especially because Roy W. Cloud, who could not attend, had asked him to be present as the representative of Mr. Cloud and the California Teachers Association. He welcomed the delegates to San Luis Obispo County and asked to be a listener rather than a lecturer.

Mr. Beswick spoke briefly on some of the problems in the vocational education work of the state, and told of some of the things that organized teachers may do to inform themselves for intelligent action at a not far distant time when some of the newer things in education may have to be justified and defended in order to survive. He told of the importance of that type of work where classes receive federal and state aid. Last year over 75,000 persons enrolled in our state-aided classes, exclusive of those for commercial and adult education, and the appropriations for these ran to several hundreds of thousands of dollars.

Organized minorities throughout the country are showing great power against unorganized majorities in a movement for control of education, Mr. Travers told the delegates. Education of the lay person regarding the educational program is imperative. Without a supporting constituency, education must give way to the reactionary minority in state and national government. Minorities propose candidates and measures favorable to themselves, and educational interests must give careful study to all measures proposed.

H. D. Hicker spoke of the Rehabilitation Teachers Association and its progress; Ralph F. Jessen reported for the California Agricultural Teachers Association, and J. A. Hull, president of the C. I. E. A., presented the report from his organization. A new group, officially represented in council meeting for the first time, was the Home and Industrial Education Association. It is an organization of women engaged in vocational education, and was represented by its president, Mrs. Effie Jane Leatart. John George Miller was the delegate from the California Aeronautics Association, and the Continuation Education Association reports were made by J. E. Carpenter, A. E. Paine, and F. C. Weber.

Luncheon in the cafeteria was enjoyed during the noon hour and was followed by the business session. Many items of business were considered, including plans for teachers' institute sessions, recommendations regarding proposed legislation, association affiliations, memberships, annual budget, and other problems.

The committee to study vocational teacher certification and credit for trade and teaching experience reported through its chairman, R. E. Gilbert. This committee is making a study of plans for evaluating vocational experience in terms of college credit. Its work is not complete, and it is to continue its work and report again at the next meeting.

The chairman of the Major Problems Committee, James A. Woods, reported the list of major problems referred to his committee by groups and by individuals. He said that his committee had undertaken to list all problems worthy of study and that the following topics have been proposed:

- A. Research in the field of accomplishments in vocational education.
- B. Memberships and affiliations.
- C. Selection, counseling, or guidance of students of vocational courses.
- D. Public relations.
- E. Perfecting continuity of leadership in organization.
- F. Cooperation with State Department of Education.
- G. Cooperation with California Teachers Association.
- H. Recommendations for methods of evaluating ability and giving recognition to members of outstanding service in the field of vocational education.

The council adopted for study all of the problems as proposed, and recommended that each representative carry back to his association a list of the problems and a request that his group select for careful study and investigation at least one of these problems.

C. I. E. A. Meets in Santa Barbara

The California Industrial Education Association met in annual convention at Santa Barbara on July 14, 15, and 16 to consider problems affecting the industrial arts and vocational teacher. The convention was opened with a state conference in industrial education led by Mr. John C. Beswick, assisted by Miss Maude I. Murchie, Mr. Julian A. McPhee, Dr. Ira W. Kibby, and Mr. H. D. Hicker, all of the State Department of Education.

General sessions, sectional and departmental conferences, luncheon meetings, and business meetings, occupied the delegates during the three days which followed. Among

those taking part in the convention were Dr. Vierling Kersey, state superintendent of public instruction; Dr. Edwin A. Lee, director of the Division of Vocational Education, University of California; Mr. Benjamin W. Johnson, assistant director of the Division of Vocational Education, University of California at Los Angeles, and Mr. Morgan Smith, president, California Vocational Federation.

Social features of the convention included a barbecue, tours to points of interest at Santa Barbara, a golf tournament, banquets, exhibits, and dances.

The convention was concluded with a business meeting at which reports on the work of the past year were made by the retiring officers. Notable progress in the work of the association under the leadership of Ray J. Casey, retiring president, was reported.

New officers elected to serve during the coming year were:

President—J. A. Hull.

First vice-president—Robert Thistlewhite.

Second vice-president—A. W. Miller.

Secretary-treasurer—Charles Townsend.

Editor—James H. Bedford.

Aeronautics Teachers Meet

The Aeronautics Teachers Association was organized for the purpose of bringing together the credentialed aeronautics instructors of the public schools, the instructors of the major private aeronautical schools and the leaders in the various branches of this field into one organization with definite objectives pertinent to instruction in aeronautics. It was thought that these instructors may become further inspired in a professional way and give uniform and up-to-date instruction in their science to those students who are interested in aeronautics or who desire to specialize in one of its branches.

This association was affiliated with the California Vocational Federation in order that it may be in harmony with the program of vocational and industrial education in the state of California.

To carry out this objective the organization was completed by adopting a constitution and electing a president, vice-president north, vice-president central, vice-president south, secretary, and treasurer, as stipulated in the constitution. A series of meetings was held throughout the year where renowned leaders in the various branches of aeronautics lectured, giving inspirational and educational material to the instructors to pass on to their students. The association was a great success during the school year 1931-32 as was evidenced by the enthusiasm of the members and a doubling in the membership.

For the coming year, 1932-33, the association re-elected the officers of the preceding year, namely:

President—T. A. Woolsey.

Vice-president (south)—W. I. Staples.

Vice-president (central)—J. R. Bell.

Vice-president (north)—P. M. Farrar.

Secretary—W. A. Hammond.

Treasurer—P. W. Hairgrove.

Representatives to the California Vocational Federation are: T. A. Woolsey, John George Miller, and W. I. Staples.

The association will be conducted this year in the same manner as last year. It will contribute further to the advancement of aeronautics by assisting the State Depart-

ment of Education and the University of California in organizing uniform trade analyses and instructional data to be available to all instructors of aeronautics.

The association will also assist the various instructors in organizing aero-clubs to be conducted as extra-curricular activities.

THEODORE A. WOOLSEY.

Continuation Association Hears of Denver Opportunity School

The Continuation Education Association of California held its third annual meeting in Haviland Hall, Berkeley, on July first. About fifty people interested in continuation education were present from all parts of the state.

John E. Carpenter, president of the association, introduced the speaker of the occasion with the statement that the topic typifies the ideas and ideals of the best thought in continuation education in California. The speaker was Professor Fletcher Harper Swift of the University of California, who gave a lucid account of the Denver Opportunity School. He described the varied types of instruction offered by the school and the personal consideration given to each person who entered its doors.

Later the meeting took the form of a conference, the discussion centering around the question, "What can continuation-education people do to protect their program against the attacks that are imminent from the approaching session of the legislature and from other groups responsible for injecting economics into school programs at the expense of the best interests of the young people of the state?"

A motion was made and seconded that the incoming president appoint a publicity committee to promote such activities as would enable the continuation school people to meet legislative and other attacks. The feeling was unanimous that all should work on a program of defense.

The following officers were elected for the ensuing year:

President—F. C. Weber, Los Angeles.

Vice-president—P. B. Maughan, Pittsburg. (Deceased.)

Secretary-treasurer—Mrs. A. H. Davies, Glendale.

Assistant secretary-treasurer—A. B. Campbell, Berkeley.

Representatives—J. E. Carpenter, Sacramento; A. E. Paine, Huntington Park.

The meeting adjourned at noon, when a group of twelve enjoyed an informal luncheon at the Women's Faculty Club, sponsored by Dr. Palmer.

VIRGINIA HUBENER, Secretary, 1931-32.

New Association Joins Federation

The Home and Industrial Education Association is composed of specialized women teachers in industrial arts and vocational homemaking. It was organized at Santa Barbara during the state conference of the California Industrial Education Association in July. The following officers were elected:

President—Effie Jane Leatart, Los Angeles.

First vice-president—Bertha G. Hudlow, Long Beach.

Second vice-president—Lillian P. Schroder, Los Angeles.

President, Northern Section—Sara Barrett, Stockton.

Secretary—Juanita Darwin, Los Angeles.

Treasurer—Blanche M. O'Brien, Los Angeles.

The association has for its objective the general welfare of its members, together with mutual encouragement and assistance. The members and those responsible for the organization believe that closer contact and cooperation will make possible a higher standard of teaching and assist in the development of the industrial education program in the state.

Most of the members of this association were former members of the C. I. E. A., but after considerable study of conditions, it was decided that an organization which included both vocational and avocational teachers was needed. The Home and Industrial Education Association has the same high objective toward education as that of its brother organization, the C. I. E. A., and is affiliated with the C. V. F., and the A. V. A. The association will have an advisory council composed of one woman from each college in the state to advise the members and assist in outlining a course of study best suited to their particular need.

EFFIE JANE LEATART.

Will J. French Addresses Continuation School Teachers

The Bay Section meeting for the continuation-school teachers will be held on Wednesday morning at 9:30 in Central Trade School, Oakland. Will J. French, director of the state department of industrial relations, will speak on employment conditions. Dr. Richard Rutledge, principal of the Merritt School of Business, will speak on changes in the curriculum. A. B. Campbell, director of adult and continuation education in Berkeley, will discuss changes in personnel in the continuation school.

A collection of continuation-school projects from the recent State Fair will also be on display.

Kersey, Lee, and Cadman Address Bay Section

The Council of the Bay Section, C. V. F., has arranged for a section meeting at the Bay Region teachers institute at which Superintendent Vierling Kersey, Professor Edwin A. Lee, and Professor Paul F. Cadman will speak. This meeting is scheduled for Tuesday, November 22, at 1:30. It will be held in the auditorium of the Women's City Club. The meeting will be preceded by an informal luncheon at the club.

Teachers of agriculture, aviation, and industrial education, continuation-school teachers, and teachers of Braille are included in this section of the C. V. F. and are urged to attend the luncheon as well as the later program.

Vocational Teacher Training at U. C. L. A.

(Continued from page 7)

for evening school appointments. A large number of these are trainees who have been taking the regular teacher-training course. This is of interest because regular teachers who have been teaching in the day schools heretofore have been given preference for evening-school positions before calling upon those who have not been employed as teachers.

The problem of training evening-school teachers will be more difficult this year than usual. Steps are being taken to organize this work completely so that every evening-school teacher will be given an opportunity to take the minimum 30-hour teacher-training course required.

Publications

The Division of Vocational Education has been made responsible for preparing a bulletin on cosmetology similar to the bulletin now in press dealing with the auto-mechanic's trade. This should be a timely publication as cosmetology is rapidly becoming a leading profession, employing thousands of women in its service. In addition, every woman is now interested in cosmetology, and it is becoming increasingly valuable due to the countless number of women who are wisely taking advantage of the culture possible through training in this field.

The bulletin is being prepared so as to prove of value not only to cosmetology teachers but also to employers and employees in beauty shops. The value of a highly trained operator is fully recognized by the state, since each one is required to pass an examination in order to obtain a license. It is evident that the value of having the teachers of such operators trained in the best methods of teaching is becoming recognized, as the proposal has been made that every cosmetology teacher, licensed within the state, should complete a teacher-training course even though such an operator is teaching in a private school. Every floor woman in charge of apprentices should certainly know and be able to apply the simple principles of teaching.

EDUCATION AS GUIDANCE

BREWER, JOHN M. *Education as guidance*. Macmillan, 1932. Price, \$2.75.

In his latest book, in which he makes a plea for the synthesis of education, Professor Brewer is at his best. He examines the alleged aims of education, shows their inadequacy, and points out that the answer to the question, "What is education?" varies with our conception of "What is life?"

Dr. Brewer clears away all trite words and platitudes and claims that the evidence of living is activity. For all phases of life activity, that type of guidance which leads to self-direction is essential, he argues. With this premise, he develops the basis of curriculum-making and the methods of educational guidance, and guidance for home relationships, for citizenship, for vocation, for leisure and recreation, for personal well-being, for religious activity, for ethics, for cooperation, and for cultural action. He also makes a proposal for the use of the present program of studies in the schools to give opportunity for all these phases of guidance as a compromise curriculum until complete revision can be made in terms of the living activities of young people.

Dr. Brewer points out that vocational schools of all kinds are not sufficiently concerned with vocational guidance; law schools enroll students who do not intend to practice law, normal schools enroll many graduates who will not teach, and trade schools have trainees who never follow the trades for which they are prepared. Vocational guidance must, he concludes, accompany vocational education.

The auxiliaries to guidance, such as records, tests, rating systems, and the administrative plan are briefly discussed. Dr. Brewer's real thesis is his underlying philosophy of life and education, namely that: "... the problems of living, as problems, should be made the subject matter of school and college work," and it is the business of educators to discover the best kind of activities for young people and guide them in their practice of these activities. E. G. P.

Future Farmers Show Valuable Investments

Future Farmers of America in California, who are high school vocational agriculture students organized in this national association, gave the quarter-million visitors to the state fair in Sacramento a new impression this year of the scope of the activities of this group.

The popular conception of a boy with a pair of pet rabbits disappeared when it was learned that these boys in California produced \$600,000 worth of farm products last year, at a profit of more than \$100,000 and a labor income of \$150,000; and that the highest twenty Future Farmers in the state selected at the state convention for the California Farmer degree had agricultural investments and incomes equal to those of the average farmer.

They learned that these twenty boys farm a total of 275 acres of grain and hay land, 1891 acres of pasture and 21 acres of truck crops and vegetables; that they are raising 188 head of hogs, 35 head of sheep, 104 dairy cows, 39 head of beef cattle, 2940 laying hens, 974 baby chicks, 309 turkeys, besides conducting many lesser enterprises. Seven are high school seniors, 11 are juniors and two are sophomores.

The public learned that these boys could conduct a three-day convention of representatives of high schools throughout the state; and that they could present a public ceremony in which Governor Rolph presented the twenty California Farmer degree keys and in which the state president of the F. F. A., Randall Allgire of Live Oak High School, was master of ceremonies before 30,000 spectators.

The public learned that these boys are raising some of the finest livestock in the state when Rollin Lander of Ceres won grand champion barrow and pen of barrows in the open classes and the Future Farmers took more than 90 awards in the open division against the best adult breeders in the West.

And, most important, the public learned that these boys are making the most of their practical high-school educational advantages; that they are learning agriculture and rural citizenship; and that they are destined to become the leaders among the "future farmers of California."

JULIAN A. MCPHEE.

Livestock Shows are Educational

The major fall livestock shows in California give the high-school agriculture students a four-fold opportunity: to compare their own animals with those of other boys, to compare their entries with those of the finest types entered by adult breeders, to auction fat stock at better-than-market prices, and to sell breeding stock.

Of the fat stock, only swine were sold at the state fair at the auction sponsored by the California Swine Breeders' Association. However, the Future Farmers sold a number of purebred dairy bulls and heifers, rams and ewes, and boars and sows for foundation animals.

At the South San Francisco Junior Livestock and Baby Beef show in mid-November, the Future Farmers will show and market about \$15,000 worth of beef animals, lambs, and barrows. No breeding stock is shown at this exhibit, but the same opportunities in competition and education are available. Only junior exhibitors show at this event.

The final livestock show will be held in Los Angeles the last of November, attracting largely Future Farmer live-

stock raisers from the southern half of the state. County and district fairs also offer opportunities for show and some sale of breeding stock. At the Tulare county fair this year, about 70 per cent of all the livestock exhibited in the entire show was owned by Future Farmers from Tulare, Kings, and Kern counties. The junior division of the Glenn county fair at Willows is entirely managed by Future Farmers of the Orland High School chapter. A Future Farmer from the Chaffey Union High School at Ontario has been superintendent of the junior division at the Los Angeles county fair for the last two years.

At each of the major livestock shows, educational and entertainment programs are provided for the exhibitors and for many other juniors who visit the show. Camp Condee at Pomona, Camp Lillard at Sacramento and a program provided by the sponsors at South San Francisco, all are instructional in nature.

JULIAN A. MCPHEE.

Agriculture Teachers Confer at San Luis Obispo

High school vocational agriculture teachers in California, who attend their own summer session and conference sponsored by the state department of education and bureau of agricultural education at the California Polytechnic School at San Luis Obispo, have found three distinct types of instruction valuable to them, as illustrated this year.

Subject-matter talks combined in some instances with laboratory work, is one of them. Courses such as marketing and economics, taught by Dr. E. A. Stokdyk and Edwin C. Voorhies of the University of California; continuation and evening schools by J. H. Pearson, specialist in agricultural education for the Federal Board for Vocational Education; floriculture and plant propagation by Wilbur B. Howes of the Los Angeles school system, poultry nutrition by W. F. Holst of the University of California, and various other agriculture courses taught by specialists of the state Bureau of Agricultural Education followed this plan. The instructors were lecturers and conference leaders combined.

Another type was the straight lecture, with such speakers as James K. Wallace, senior marketing specialist, U. S. D. A.; Alex Johnson, secretary of the California Farm Bureau Federation; George Sehlmeier, master of the California State Grange, and others.

A third type was the straight conference in which teachers themselves exchanged results of experience to the benefit of the group. These were largely done in committee meetings, followed by summarization and recommendations to the entire agriculture teacher's association.

A recreation program of surf-bathing, baseball, handball, volleyball, tennis, and horseshoe pitching was scheduled for each afternoon of the two weeks' summer session and one week of conference. Credit toward credentials is given through the state department of education.

JULIAN A. MCPHEE.

THE COVER PAGE

The cut on the cover page is from a painting made at the Frank Wiggins Trade School for William S. Kienholz, supervisor of vocational education in the Los Angeles city schools. The picture, typifying youth needing guidance as they face the future in business and industry, hangs in Mr. Kienholz's office.

Work of the Bureau of Homemaking Education of the State Department of Education

By MAUDE I. MURCHIE

Chief, Bureau of Homemaking Education, State Department of Education

Like other bureaus of special fields in vocational education, the Bureau of Homemaking Education functions through the Commission for Vocational Education, an official, coordinating body of the State Department of Education.

Functions of the Bureau

Among the objectives of the bureau are the promotion and development of acceptable standards in home-economics education primarily in secondary schools; the promotion and supervision of federal- and state-aided home economics instruction for girls in junior and senior high schools, and for women enrolled in classes in which the major part of the class session falls before six p.m.; the initiation, promotion, and supervision of federal- and state-aided programs in teacher training; also, the exposition of suitable plans and procedures and the distribution of such in bulletin form to schools and to teachers; and the cooperation with other bureaus and divisions of the State Department of Education in providing educational service.

General Survey

A few school districts in the state have found it necessary to make curtailments in their home-economics education offerings for the coming year. The greatest elimination has occurred in elementary schools in centers where good junior high-school organizations exist. However, the elimination of organized programs in home economics in grades below the junior high school is a practice which has been in operation throughout the country in centers where increased offerings have been provided in junior high school programs. In a few places only, has supervisory service been decreased or eliminated.

Nevertheless, on the whole, much progress has been made in the development of home-economics education in the state during the past year. The home-economics special-day program for adults exceeded that of last year in numbers enrolled and in scope of work offered. The all-day programs for girls of high-school age have been widely distributed in the state, and greatly improved in teaching content and in methods of instruction. The value of home and school project instruction has been recognized by school officials and teachers. Many additional schools are ready to organize programs for the coming year.

Standards Established

Desirable standards and recommended practices have been introduced largely through the standards set forth and promoted under the regulations of the federal and state vocational-education acts which made it possible to set up certain controls and limitations which accelerated the acceptance of such standards.

Programs, one or two years in length, are organized for girls fourteen years of age or over in junior and senior high schools. The subject matter relates to the essential responsibilities and duties in the home and is organized into courses adapted to the interests and capacities of a given group of girls. The details of these programs are set forth in State Department of Education Bulletin No. C-2. During the school year 1931-32 promotional all-day programs

for girls of high-school age were maintained in California enrolling 1,704 pupils. These promotional centers were well distributed throughout the state.

Instruction which Functions Socially

Many schools organized directed activity programs of home practice and home projects in homemaking responsibilities and duties, representing normal home activities and interests of the girls. This program makes possible a type of homemaking education which functions in the lives and homes of the girls.

Through vocational classes, 2,293 home projects were developed in 1931-32. These projects included such phases of homemaking as budgeting, child development, clothing, food production, preparation and service, nutrition, marketing, health, home gardening, home furnishing and improvement, home management, laundering and general house-keeping processes, home entertainment, home nursing, family relationships, and personal improvement.

Program of Saturday Conferences for Home-Economics Teachers

During 1931-32 this bureau organized a series of twenty-five Saturday conference programs for home-economics teachers. Five hundred twenty-nine home-economics teachers, from 323 unsupervised high schools with but few exceptions, were invited to these conferences. Five hundred six persons, including some teacher trainers and home-economics supervisors, attended these meetings under the leadership of the bureau chief or of a regional supervisor.

The purpose of these conferences was to stimulate the thinking of the teachers for an acceptance of a broader philosophy of homemaking education; and to point out to them the desirability of organizing and scheduling homemaking courses in the high-school program so that the majority of girls might receive a unified training program during their period of high-school attendance.

Usually one-half day of the conference was given to objectives in homemaking education and to miscellaneous teaching problems, and one-half day to curriculum building.

Supervisory Service

The development of teacher-training projects in the University of California at Los Angeles, and in connection with the State Teachers Colleges at San Jose, Chico, and Fresno has been for the purpose of stimulating these institutions respectively, in the training of teachers to meet the educational needs and demands of the public more effectively by placing these institutions in direct relationship, through this bureau, with the public-school programs. These institutions have thereby rendered invaluable service to this bureau through their cooperation.

The Chief of the Bureau of Homemaking Education has organized a program for state and local supervision and for the training of teachers in service. A competent personnel has been secured—four regional supervisors and one local supervisor. The programs of the supervisors have been differentiated to meet the needs of their respective regions and the special objectives of this bureau.

A local supervisor was established in the city of Oakland, cooperating with this bureau, whereby the city furnishes laboratory and research facilities of an experimental type to forward the programs of adult and part-time education in homemaking.

The local supervisor in Oakland was assigned the training of teachers of homemaking in the general continuation school for minors. The local teachers, with her assistance, made the necessary surveys of the student personnel, defined the educational objectives, and determined the suggestive content to be put into effect during the coming year. A program of recruiting and training of teachers of adults was also initiated in this city.

A program of work in connection with the position of a regional supervisor was set up in the city of San Diego on a cooperative basis. The city program for the past year involved the making of an educational survey of the needs in homemaking for the Memorial Junior High School, and the preparation of recommendations for suitable curricula. This project will be continued during the present school year.

Provision was made for resident teacher-training service in Chico State Teachers College, including conference contacts with student teachers in home-economics training, and a course in home-economics education based on the supervisory experience gained in the regional service for this bureau.

Provision was made through the regional supervisor of the San Joaquin Valley area for a continuance and further development of the cadet teacher-training center established in connection with the Fresno State Teachers College in a high-school operating under the federal and state vocational education acts.

This is the first time the college has undertaken cadet practice teaching in homemaking. A very excellent opportunity is being provided at Chowchilla under a splendid teacher with a principal who is enthusiastic over the program. President F. W. Thomas of Fresno Teachers College made special concessions to permit the student to make this departure in her training. Student teachers were also taken on a visit to certain schools selected as representing a special teacher-training contribution for the group.

Supervisory service has been provided for the south coast area with a regional supervisor established with headquarters in the State Department of Education at Los Angeles.

Teacher Training Activities

The teacher-training program sponsored and promoted by this bureau is made up of projects representative of ideals and standards which heretofore have not been developed. Since 1918 experienced homemakers have been recruited by certain teacher-training institutions cooperating with this bureau, and trained as home-economics teachers of high-school grade. For several years the state teachers' colleges at Chico and San Jose, and the University of California at Los Angeles have maintained these programs. The object was to introduce into the teaching group of the state, women with acceptable homemaking experience, since the equivalent of this experience can not be provided through teacher-training institutions during the period of training. This program has proven a definite asset both to the public-school system and to these institutions, and is set forth in State Department of Education Bulletin No. C-8, revised March, 1929.

In 1924 this bureau initiated and promoted in the home-economics department of San Jose State Teachers College the organization of a child-laboratory project and a parent-laboratory project for the purpose of providing persons in training as teachers of homemaking subjects with a better understanding of child life, that they might be better equipped to handle subject matter dealing with child development in homemaking courses for girls and women. In connection with these projects a home-management project was developed with student residence in the homemaking apartment of the institution under the direction of a vocational teacher trainer.

These projects have resulted in increasing the emphasis in child-development and home-management problems both in the technical and special education courses of the department. The activities of these projects have definitely articulated with those of the departments of health, physical education, education, psychology, English, and kindergarten, respectively. Major building and equipment improvements have been provided for the furtherance of this project from time to time. The sum of \$2200 from the vocational-education fund is applied to the support of this program yearly.

During the year 1929-30 this bureau initiated and promoted in connection with the Chico State Teachers College, a practice teaching project in cooperation with the Chico public school system, making provision in connection with the general continuation class at the high school for practice teaching opportunities for persons training as teachers of homemaking subjects. The Chico school officials, including the local coordinator for these girls, have responded wholeheartedly to this project and provided a room for the program in the high-school building, which was equipped by the local board of education and the state teachers college, to provide a diversity of teaching interests in the field of homemaking for the girls. The project is regarded as an invaluable one for all persons concerned.

At the State University in Los Angeles, in addition to the recruiting and training of experienced homemakers, the bureau has promoted the development of a home-management course and improved practice teaching opportunities in the public high schools of Los Angeles. A course in family relationships promoted as a part of the vocational teacher-training program has been given recognition for upper-division credit in that institution. The sum of \$2500 from the vocational-education fund is applied to the support of this program yearly.

Home Economics and the New Requirements for Graduation

Eventually greater recognition of homemaking education as basic in the education of both sexes should grow out of the realization of the intent and purpose of the new state requirements for graduation. Under the leadership of the State Department of Education, the State Board of Education has definitely liberalized the requirements for high-school graduation. All major and special subject requirements previously prescribed by the State Board have been eliminated. The two subjects retained by the Board, health and physical education, and American history and civics, are statutory prescriptions.

The use of the term "credit" has been discontinued. The differentiation in credit value, which for years has been traditionally applied in rating laboratory and non-laboratory subjects, has been eliminated. Each learning period has been given equal value in meeting the minimum total of semester periods required for graduation. A minimum of 190 semester periods of classroom instruction and supervised learning activity has been stipulated to fulfill the requirement for high-school graduation. However, this minimum may be increased by local boards, to provide an adequate educational program for a given student or for a group of students, but such requirement may not be in excess of 240 semester periods.

Major subject fields were emphasized in the old regulations, but in the new regulations the emphasis has been transferred to differentiation in curricula.

This liberalized program for public high-school education makes it mandatory for school administrators and teachers to assume the responsibility for the determination and organization of rationalized curricula. Variations in student needs and capacities in the attainment of the larger social objectives can no longer be ignored. Thus new emphasis must be given to guidance programs without which the suitability of curricula to pupils' needs cannot be determined.

Whenever a pupil shall have completed satisfactorily the requirements of a given high-school curriculum meeting the minimum semester period requirement he shall be awarded a diploma of graduation regardless of the length of time taken to complete such requirements.

The principal of each high school is authorized to issue a certificate of completion to any student who successfully completes any high-school course of study or curriculum of less than four years.

The educational philosophy reflected in these requirements should develop a fine integration of homemaking education with other school subjects. The related subjects of science and art must eventually yield their maximum contribution toward the education of the consumer.

MAUDE I. MURCHIE.

Vocational Education News Items

Merritt School of Business.—The newly appointed principal of the Merritt School of Business in Oakland is Dr. Richard E. Rutledge, succeeding Mr. R. R. Stuart, who has been in charge of the school since it was established as a business school. Dr. Rutledge, who has been in charge of research and curriculum construction in the Oakland schools, is leading the staff of the Merritt School of Business in a revision of the courses offered at the school.

Central Trade School and Merritt Business School in Oakland have been officially declared high schools and their directors, Will C. Mathews, and Dr. Richard E. Rutledge are now principals of these respective institutions.

An "Open House" was scheduled at Merritt Business School on the evening of November seventh. The various departments displayed the equipment and the activities of the school. The departments represented were machine calculation, bookkeeping, duplicating machines, general clerical, stenotypy, dictating machines, bookkeeping machines, filing, shorthand and typing, and retail selling.

Students, parents, educators, and others interested in this unique school took advantage of the opportunity to see the demonstrations and displays.

Frank Wiggins Trade School.—Each year Frank Wiggins Trade School adopts a special objective. Last year it was the purpose of the faculty working through special committees to study the field of tests and measurements as applied to vocational education. Many excellent tests were developed by members of the faculty to measure occupational achievement. Examination was also made of the available tests on interest, personality, mechanical aptitude, etc. This year the Wiggins faculty will attempt a study of the problem of teaching trade citizenship, trade ethics, and industrial relations. With the employment situation still in a questionable condition, it will be necessary to study more carefully the demands of employers upon workers. Personal salesmanship will play a large part in job finding. Ability to work with others and a complete knowledge of the occupational field must accompany trade skill.

The project will involve the development of content in trade ethics, personality development, and industrial relations. Conferences will be held to determine the most desirable methods to use in presenting such material and in character development for trade students.

Berkeley Loses Placement Secretary.—As placement secretary, first for the continuation school and later for the whole school department, Miss Ruth L. Turner served the Berkeley School Department for five years. During this time she found employment for hundreds of boys and girls and placed many of the adult clerical staff in the schools.

Miss Turner resigned on the first of September, going to Portland, Oregon, where her marriage to Clay Barnes took place at the home of her brother. Mrs. Barnes is living at present in North Dalles, Washington, where Mr. Barnes is in charge of an irrigation project.

Miss Turner was the first president of the Continuation Education Association of Northern California and will be missed by the many people who knew her and appreciated her contribution to vocational education and employment.

Reorganization in Los Angeles.—In the reorganization of the Los Angeles school department the Division of Vocational Education now includes commercial education, salesmanship, trade and industrial education, and agricultural education. All of these phases of vocational education are under the supervision of William S. Kienholz who heads the Vocational Education Department.

Mr. A. G. Waidelich, former vice-principal of Frank Wiggins Trade School, has earned a well deserved promotion from the Los Angeles school board. He was, on September 1, appointed principal of the Torrance High School. This is one of the suburban high schools of Los Angeles, serving an industrial district, and Mr. Waidelich will have an opportunity to develop a vocational high school that will meet the immediate needs of the community.

Mr. Waidelich is well known to many of the vocational teachers of the state of California. He has been associated with Mr. B. W. Johnson in the training of vocational teachers at the University of California at Los Angeles for the past five years. His work in the winter classes and the summer session is well known for its high quality. He has been responsible for many of the progressive developments in the Frank Wiggins Trade School and excellent things may be expected of him in the development of a complete program at Torrance High School.

Opportunity Schools Train Unemployed Women

Opportunity schools or classes for women and girls displaced from productive industry as a result of the depression and who need retraining for new occupations, and for those who desire to increase their efficiency in their present jobs or to reacquire a lost proficiency or skill, have rendered a signal service during the past year. The annual report of the Federal Board for Vocational Education, which is responsible for this information, shows that these schools have been particularly effective in giving displaced women and girls, desirous of shifting to specialized household occupations, part-time trade preparatory training for such work.

One gets a new idea concerning the variety of occupations and fields in which training is offered women and girls under the national vocational education program now carried on in the states, by a reading of the board's report. For instance, apprenticeship classes, it is shown, have been continued in the classing and grading of paper, manufacturing of radio tubes, lining and stitching of shoes, topping and looping of hosiery, and the stitching and inspection of garments. Training courses in the food trades, conducted both in schools and in plants, are increasing rapidly. Appreciating the value of these courses the National Restaurant Association has made a special effort to foster interest in training courses among its members. Cosmetologists, realizing the necessity for basic training for a trade which is growing in both volume of business and numbers employed, are fostering the establishment of courses under public supervision and control, as a means of raising the legal standards of the occupation in their respective states.

One large center of the floral industry has developed an evening trade class in the construction and arrangement of floral decorations for both men and women employed in the trade. A program for the training of dental assistants has been instituted in one state, and what is more striking, every student completing the course has been placed.

Courses for nursing attendants and centralized training in technical subjects for nurses have in a number of states been provided under the direction of hospital training supervisors. This instruction, which conforms to the curriculum for schools of nursing outlined by the National League of Nursing Education, is given by instructors furnished by state vocational education authorities, who meet the qualifications required by the League.

Even the mountain women in isolated districts of Georgia, North Carolina, and Tennessee have benefitted from the vocational training programs operated in those states. Courses intended for this group emphasize the fireside industries with the result that a revival of linen fabric weaving, and the making of such articles as coverlets and homespun suitings, has been effected, the products of these industries having a ready sale and yielding an income for the workers. A Southern Mountain Workers' Handicraft Guild, to improve the home arts practiced in this region, is an outgrowth of the vocational program instituted for mountain groups.

More than 187,000 women and girls were enrolled in vocational trade and industrial courses, federally aided in 1931, the annual report of the Federal Board of Vocational Education shows.

—News Release F. B. V. E.

PITTSBURG LOSES DIRECTOR

Preston B. Maughan, director of adult and continuation education in Pittsburg for the past three years, after a brief illness, died on November 10, in Pittsburg, California. Mrs. Maughan and their three months' old daughter have gone to Salt Lake City, Utah, where Mr. and Mrs. Maughan previously lived.

Mr. Maughan was vice-president of the State Continuation Education Association, and his loss will be felt not only in Pittsburg but throughout the state, where he was rapidly gaining recognition for his interest in continuation education. His many friends extend profound sympathy to the boys who were his special responsibility in the Pittsburg schools, as well as to Mrs. Maughan and the young daughter.

AVAILABLE PUBLICATIONS OF THE DIVISION OF VOCATIONAL EDUCATION OF THE UNIVERSITY OF CALIFORNIA AND OF THE STATE DEPARTMENT OF EDUCATION

PART-TIME EDUCATION SERIES

- No. 4. Bulletin No. 3. Coordination in Part-time Education. March, 1921.
- No. 6. Bulletin No. 5. An Analysis of Clerical Positions for Juniors in Railway Transportation. August, 1921.
- No. 7. Leaflet No. 3. Selected Reading List for Administrators and Teachers in Part-time Schools. September, 1921.
- No. 8. Bulletin No. 6. Part-time and Continuation Schools Abroad—Reprints. November, 1921.
- No. 10. Leaflet No. 4. Recreational Reading for Part-time and Continuation Schools. March, 1922.
- No. 13. Bulletin No. 14. The Administration of the Part-time School in the Small Community. Part One, March, 1924. Part Two, May, 1924.
- No. 14. Bulletin No. 18. The Part-time School and the Problem Child: An Investment in Social Insurance. April, 1926.
- No. 15. Leaflet No. 6. A Digest of Laws for Working Boys and Girls. June, 1927.
- No. 17. Bulletin No. 24. Pupils Who Leave School. January, 1930. Price, 50 cents.

TRADE AND INDUSTRIAL SERIES

- No. 5. Bulletin No. 19. The Problem of Apprenticeship in the Six Basic Building Trades. September, 1926. Price, 50 cents.
- No. 6. Bulletin No. 21. An Analytical Study of the Duties of the Chemical Laboratory Technician. June, 1927.
- No. 7. Bulletin No. 22. Selection and Purchase of Equipment for Trade and Industrial Classes. June, 1927.

VOCATIONAL GUIDANCE SERIES

- No. 1. Bulletin No. 25. Vocational Interests of High School Students. February, 1930. Price, 25 cents.

AGRICULTURE EDUCATION SERIES

- No. 3. Bulletin No. 17. Farm Mechanics in the Agriculture Curriculum. June, 1926.

California University, Vocational Education

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The Vocational Educator Knows Economic Planning

By BENJAMIN E. MALLARY, Supervisor Trade and Industrial Teacher-training
Division of Vocational Education, University of California and State Department of Education

WE ARE ALL FAMILIAR with the homely phrase, "paying the piper." After the country folk had danced all night their joy always gave way to the depressing duty of paying for the music. Probably the shortest explanation of our present economic situation is that we are now faced with paying the debts we so freely incurred in the years when we thought that life was nothing but prosperity. The situation is critical. It is only natural for many of us to ask why we have cycles of prosperity and depression. Is there a remedy? There are some who believe that production for profit rather than production for use would regularize business and, consequently, employment. If, say the economists, we would rationally plan our national production to meet the actual needs of our consuming population there would be no temptation for the financiers to extend credit for new productive enterprises beyond the consuming power of the public. Production power must, in the long run, not exceed purchasing power.

It so happens that the vocational educator, like the manufacturer, is a producer. He produces skills, and his product, the students, must find a market for their abilities. The vocational educator has been trained to produce skills sufficient to meet the employing power of the community. He has been taught to survey his community and to estimate his skill production needs in the light of the facts of the survey. If he finds that the manufacturers of sheet-metal work need skilled mechanics he organizes a skill factory or shop class to produce according to the demand. This is economic planning on the part of the vocational educator.

The vocational educator did not over-produce during the period 1920-30. In fact, the vocational educator has never produced more than a fraction of the tradesmen which industry consumed. The vocational educator, however, is confronted by the fact that his raw material never ceases to be unloaded at the door of his shop, even though the labor market collapses. It would be a fine thing for him if the growth of youth were also deflated, but biological growth continues and each semester the vocational instructor finds new supplies of raw material waiting to be converted for a market that does not exist, and whose future nature is problematical.

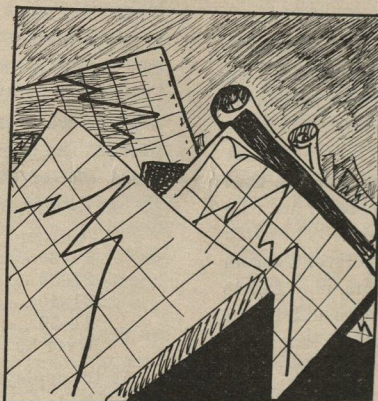
Assuming a turn in the economic tide, what will be the nature of the demands of the labor market? What skills have become obsolete? What skills will be necessary a year from now—a decade from now? A report from the U. S. Patent Office states that technological progress in the form of patents has continued unabated during the last three years. A close scrutiny of technical

journals reveals hints and suggestions of coming technologic changes of as great, if not greater, importance than those which have occurred in the past. Should the vocational educator follow the policy of watchful waiting, or is there something constructive he can do? Perhaps he owes it to his professional morale as well as to his citizenship to put his shoulder to the task rather than to continue to wait for time to draw back the curtain.

Is it true that we shall soon live in steel houses? If so, it will take specific skills to erect them. What industries will be affected in the immediate future by the effective use of the photo-electric

cell? To what extent is plumbing being fabricated by the torch or electric arc? In what ways are new alloys affecting the machinist's trade? Will the auto mechanic of the future be an all-round man, or a specialist? It is rumored that the Ford Motor Company is about ready to establish and operate its own local service stations. If so, will it train its own mechanics, or depend upon the established public educational service? These are a few of the countless problems which we are now confronting. The answers can be found. The information exists. Is it not up to the vocational educator to seek these facts, study them, draw conclusions in the form of training objectives, and then plan to train the onrushing tide of growing youth in the direction pointed out by the facts.

At the Kansas City meeting of the American Vocational Association such men as Harold S. Falk, vice-president and general manager of the Falk Corporation, Milwaukee, Wisconsin; John T. Dormois, representative of the International Typographical Union of Kansas City; A. R. Pierce, director of Personnel Relations, National Metal Trades Association, Chicago; and Miss Elizabeth G. Reeves, production man-



ager, Donnelly Garment Company, Kansas City, emphasized the changing demands of employment and the obvious necessity for the vocational educator to keep pace with these demands.

If economic relief should come from such a source as the unemployed themselves, through the rapid extension of organized barter or similar self-help methods, what constructive rôle can the vocational educator play? No one knows the economic strength which may be developed by this new way of making a living. Such movement should be watched by the vocational educator, its possible economic vitality estimated and, at the proper time, such aid in vocational training offered as the movement warrants.

Such aid might be in terms of leadership conferences. Lowered morale has been the greatest drawback to trade extension training for the unemployed. There is evidence that the organized unemployed have developed a strong morale ready to be utilized in acquiring skills which will strengthen the barter power of the group. There is evidence that some of these groups are contemplating setting up their own training as they engage in new enterprises such as the weaving of cloth and the salvaging of materials and buildings.

It is hoped that the committee on economic research of the council of the California Industrial Education Association, headed by Mr. A. W. Rees, will be able to work out some constructive ideas to present to the trade and industrial teachers of the state. Economic planning was a comparatively simple task for the vocational educator as long as he saw his goal, or thought he did. Such a plan should be a guide toward a definite objective to be attained. The more definite and clear the objective, the easier it is to plan, but since objectives precede plans it is upon the objective that we must focus our immediate effort. For those of us who are mentally lazy a way out will at once appear. That will consist of conjuring up a vague general objective. Therein lies the danger that we, as vocational educators, may fail to accept the challenge of the present situation to aid in the development of the future economic order, whatever its nature.

The times call for specific action from us all. We have been trained in planning; we are public servants and perhaps we may be one group of individuals that can discover ways out of the present national crisis.

Trends in Vocational Rehabilitation

By H. D. HICKER, Chief

Bureau of Vocational Rehabilitation, State Department of
Education

In what vocations are trained, disabled persons being placed? Is the choice of vocational objectives affected by periods of economic depression? At what age are placements most easily made? Is there a tendency to favor employment training rather than school training?

In the endeavor to answer these and related questions, a comparison was made between the 154 rehabilitations for the period July 1 to December 31, 1932, and the same number for the corresponding period of 1928, chosen as a norm.

The extremely wide spread of job objectives in each year made comparison difficult, and any statement of general

trends impossible. The 154 rehabilitants of 1932 (half year) were trained and placed in 69 different occupations; the 154 of 1928 (half year) in 72 different occupations. Moreover, only 28 occupations were common to both groups.

Certain groupings of jobs, however, revealed rather significant data. For instance the following tabulation indicates a decided trend from the construction and manufacturing occupations toward those connected with repair and maintenance work:

	1928	1932
Construction and manufacturing.....	26	9
Repair and maintenance.....	6	29

Another change which may reflect the difficulty of finding jobs in 1932 is the fact that this year 14 rehabilitants entered business for themselves as against only five in 1928. Placements of salesmen decreased from 13 in 1928 to eight in 1932. On the other hand, personal service placements (including barber and beauty-parlor work) increased from five in 1928 to 15 in 1932. Placements in office work remained about constant—32 in 1928; 28 in 1932.

The vocations common to both groups of rehabilitants are probably those in which placements are most readily made. Omitting those of single placements only, they are the following: barber, bookkeeper, cleaner and presser, dressmaker, electrician, elevator operator, engraver, laboratory technician, locksmith, office clerk, poultry raiser, radio mechanic, real estate broker or agent, salesman, shoe repairer, show-card writer, sign painter, stenographer-clerk, high-school teacher, typist-clerk, watch repairer and welder.

There was very little difference in age between the two groups. The average age of the 1928 rehabilitants was 30.5 years, and of the 1932 rehabilitants 30.6 years. Segregated by age groups, the comparison is as follows:

Age group	1928	1932
16-20	29	25
21-30	58	62
31-40	46	41
41-50	16	20
Over 50	5	6

As to employment or job training, there has been a constant increase in the proportionate number of cases so trained, although the actual number is still small. The proportion of employment training cases to school training cases was in 1928, 4 per cent; in 1929, 5 per cent; in 1930, 5½ per cent; in 1931, 6½ per cent; and in 1932, 8½ per cent. The tendency is obviously to favor this type of training in suitable cases, but it has been found difficult to arrange programs which emphasize instruction rather than production.

Summing up, the fact that 110 different varieties of jobs were used in placing some 300 disabled persons indicates a responsiveness to the individual factors of each case. At the same time a vigilant check is kept on industrial conditions so that training programs may be modified to meet changes, such as the shift from construction and manufacturing trades to maintenance and repair jobs. As to age, placements become increasingly difficult over the age of forty. Employment training, when satisfactory programs can be arranged, is growing in favor.

The chief consideration in every case, however, is the good of the disabled trainee concerned; his best interests must never be sacrificed for the sake of ease in placement or any other expediency.

Trends in Vocational Guidance

By EDWIN A. LEE, Director

Division of Vocational Education, University of California, Berkeley

Three statements which have been received from different parts of the state regarding trends in vocational guidance represent the careful thinking of capable men face to face with actual firing-line conditions as they relate to the problem of counseling youth in these perplexing times.

Decline of junior employment.—From all parts of the state come discouraging reports of decreased junior employment. John E. Carpenter, director of Adult and Vocational Education in Sacramento, says:

"The fact that the number of working permits issued to minors in 1932 in one city in California was less than 50 per cent of the number issued in the same territory in 1929 is sufficient evidence to indicate the more difficult problem facing counselors who advise students regarding immediate employment possibilities."

Eliot F. Landon, director of Adult and Continuation Education in San Diego, tells a similar story. "Unemployment in San Diego, as elsewhere," says Mr. Landon, "is a very serious problem. Its widespread nature is such that it has touched everyone, directly or indirectly. It is not strange, therefore, that it has influenced the thinking of young people in school. From our experience and from the records available in our school employment office, it appears that junior employment has been reduced at least 50 per cent since 1929."

G. M. Hoyt, who is in charge of attendance and employment of minors in Los Angeles City Schools, reports that, "Work permits have dropped about one-third since 1929."

Educational trends.—Each of the writers seems to feel a trend toward more general education. That is undoubtedly the case in many cities, but it may be questioned whether this is a trend which should be enthusiastically encouraged unless we are to have a new kind of general education. We, in America, have always had a blind faith in education and the tendency to get more education as a means toward solving our present problems seems to me to be based on wishful thinking rather than demonstrated worth. Certainly the men who were educated during the past few decades have not, by virtue of that education, succeeded in understanding, or preventing, or solving the problem of living in the period 1927-1933. If we are to have more education for everyone it ought to be geared into living in terms of the era of which we are a part.

To quote Mr. Carpenter again: "This growing tendency to 'stay in school' and in 'general' courses reflects, unquestionably in part, the inability or unwillingness of the school counselor to advise students to enter definite vocational-training classes. The counselor fears to give definite advice which may prove later to have been unwise, and retires behind the safe and sane refuge of suggesting a little more general education, which will harm no one."

The tendency of employers to raise their standards in terms of education, thinking, no doubt, that this is one way in which to eliminate undesirable candidates, is reported from the placement office in Los Angeles.

"An oil company of nation-wide scope which formerly accepted high-school graduates as gas-station attendants now insists on college graduates and prefers those with

a Master's degree in business administration. There is no dearth of applicants for the work.

"A prominent concern, feeling the need of a more aggressive selling campaign, established its own sales and service organization. College graduates were accepted as 'beginners' at about thirty-five dollars a month. All openings were quickly filled. A large chain-store organization requires all young men employed to be college graduates. Beginning salaries are usually about eighteen dollars a week. One large Los Angeles organization will take high-school graduates, but wants honor society students. What, then, is left for the ordinary high-school graduate? We encourage many of them to take post-graduate work or to go to college."

From San Diego again comes a similar report of the trend in selection of courses:

"With these conditions existing, it is to be expected that we find that young people are looking more seriously into the future than they have ever before. In this questioning and seeking for avenues of transition from school life into economic and social life, there has come, I believe, a discouragement or at least a bewilderment over the immediate selection of a vocation. As a consequence, more attention is being paid to general education."

Improving skills.—In the three school systems represented, counselors are urging young people who are trained for employment to keep improving their skills. From Sacramento comes the statement: "Advising young people to stay in school and obtain an improved training for whatever occupation they eventually hope to enter seems to be the only safe course for the counselor to pursue at the present time."

Mr. Hoyt of Los Angeles agrees that, "If any vocational skills have been acquired in high school, they must be kept polished in the hope of better days ahead."

Girls secure employment.—The placement division in Los Angeles reports one trend which was not mentioned in the other cities: "Of interest is the fact that now two girls to one boy get work permits. A few years ago this condition was just reversed. A girl leaving school before graduation can work at domestic service, in restaurants, in certain kinds of factories, in retail stores, etc. The lower minimum wage for girls under eighteen years of age gives them an advantage in the latter field. But for the boy under eighteen, there is only hazardous bicycle errand work, and a few house-to-house selling jobs. Banks, financial houses, oil companies, large offices and stores are tightly closed to the boy under eighteen years of age.

Any job will do.—From north and south come reports that any type of employment is accepted. Mr. Carpenter says: "There is at present a very definite tendency for all young people to be willing to 'take anything' in the way of a job. Placement bureaus find this the common attitude of all applicants, and the applicant who refuses to try any job offered him is rare, indeed. The immediate monetary reward is a stronger incentive than ever before in recent times." Mr. Hoyt, too, says, "Those who must work are willing to take anything."

And Mr. Landon reports: "Young people now coming to us are accepting any type of employment open to them, regardless of personal ambition. Necessity has forced aside personal considerations, and employment of any sort is accepted. Care must be taken to see that our youths are not competing with and supplanting heads of families in the labor market."

Need for information.—Each of the men emphasizes the necessity for accurate up-to-date information concerning occupational conditions. It has been said that education is handicapped by a thirty-year lag. In history, quite possibly, it does not matter greatly, but in counseling even a thirty-day lag is to be questioned. Until counselors come to grips with working conditions as they are today, we shall be failing those whom we would guide.

From Sacramento comes the statement: "Without a doubt, this is the most trying time which has ever faced the intelligent and conscientious counselor attempting to help youth choose a life occupation. Adults are, themselves, nonplussed concerning the future of their own chosen occupations, and are in a poor position to advise youths concerning theirs.

"In spite of this, the best possible sources for up-to-date information concerning occupational opportunities are undoubtedly directly in the fields of employment—commercial, industrial, professional or other. The best means of obtaining this information is by direct contact through a coordination program connected with the employment of present or former students."

While from San Diego, Mr. Landon expresses the same need: "In times like these, more adequate and careful guidance is needed than ever before. Immediate need for

employment is greater in so many cases, and immediate prospects of worthwhile employment are so much less. At the time when counselors have less resources at hand than formerly, there is a greater need for understanding of current conditions and wide social vision than ever before.

"Counselors have felt a lack of up-to-date information on supply and demand in occupations. This may be due somewhat to our position of economic and geographical isolation from the active and populous centers of the state."

Mr. Landon recommends as one source of information two publications: "The Industrial Employment Bulletin," issued by the U. S. Department of Labor, and the recent report of the California State Unemployment Commission of November, 1932.

"There is no doubt," says Mr. Carpenter, "but that young people reflect, to some extent, though in modified degree, the present serious attitude of adults toward possible occupations. Many, because of the evidence which has lately multiplied before them that the untrained or partly untrained adult is first and worst hit in times of depression, and because they see no early prospect of employment in fields for which a brief course of training would be sufficient preparation, are swelling the ever-growing enrollment in regular high-school classes."

From these three centers in the state, employment trends present a discouraging picture for the youthful worker. "Perhaps," says Mr. Hoyt, "there are more hopeful trends beneath the surface which can be revealed only by painstaking surveys and statistical analysis. Perhaps there will soon be released new and revolutionary forces to carry us toward a more rational order. Pending that time, what we counselors need is the gift of prophecy."

Present Day Trends in Office and Business Employment

By IRA W. KIBBY, Chief

Bureau of Business Education, California State Department of Education

What are the present-day trends in office and business employment? Are young people being placed in office positions? If so, what do they need to know in order to find positions? Have requirements for office positions changed? These questions vitally concern teachers who prepare boys and girls to enter office and business employment.

During the past two years the enrollment in the commercial departments of high schools and junior colleges has increased tremendously. Hundreds of students, who formerly thought in terms of a college education, are now thinking of a practical education as a means by which they may qualify for a job. Never before have jobs been held in such high esteem.

It is evident that at present it is just as difficult for young people to find employment in the business field as in other fields of work. However, many are being placed in office and business positions. In some sections old employees are given preference. In other sections younger and better-trained individuals are filling the ranks when office forces are augmented.

The distribution side of business probably will be the first to feel the pulse of a business revival. When business picks up there will be a demand for large numbers of office and business workers. However, in the future, business will be more careful in selecting workers. Unproductive workers

will not be tolerated. Only the most efficient and best-trained individuals will find employment. It behooves teachers of business subjects to study present trends in employment so they can plan their courses to train students for present-day business demands.

The editor of the California Vocational News Notes asked several leaders in business education to give their reactions to the question, "What are the present-day trends in office and business employment?" These leaders gladly responded in spite of the pressure of work, and the following three articles will give teachers some idea of these trends. It is hoped that others will contribute similar articles from different sections of the state. These will be printed in a future number of the News Notes.

Trends in Retail Employment

By MONETTE O. TODD, Assistant Supervisor,
Vocational and Prevocational Education Section, in charge of
Salesmanship and Advertising, Los Angeles City Schools

Two problems confront the retailer today: How can he successfully meet local competition and make a profit? Where can he retrench and still maintain an efficient organization?

The merchant, in his eagerness for trade, has advertised his merchandise at a price and made the customer "price conscious." He arranges events called "sales," anniversary and otherwise, at which he offers "special" merchandise at "unusual" prices to the public. Mrs. Customer shops from one store to another to find the desired article at the lowest price. The unit sale has decreased. One cannot pay less for an article in 1933 than in 1932 unless this occurs. The cost of each sale has increased as a result. It requires as much time in 1933, if not more, to sell an article for a lower price, than it did to sell the same article in 1932 at a higher price.

Mrs. Customer expects as good quality in the merchandise she buys in 1933 at a low price as in the merchandise she purchased in 1928 at a much higher price. This is not possible, and "returns" have increased. Mrs. Customer does not realize, however, that in order to buy an article at a low cost the merchant must persuade the manufacturer to make an article which can be sold at the required price; the manufacturer, in turn, must make a profit or close his factory; he reduces the quality of the article, reduces his overhead, which results in lower wages for the workers and, incidentally, reduces the buying power of his employees. Merchants must make a profit in order to remain in business.

The Problem of Retrenchment

Retrenchment accompanies decreased sales. Every department feels it, and the educational department is usually the first to retrench. The employer argues that the positions held by average or inexperienced workers can be eliminated or the workers replaced with experienced well-trained people. Then, why train?

On the other hand, the unit sales must be increased and the cost of selling must be decreased. Capable, resourceful, experienced, and well-trained salespeople alone can accomplish this. Why not increase the training program? Retailers find that newspapers are the best advertising medium right now even if their drawing power has decreased. Advertising for newspapers has always been prepared under pressure. Today this pressure is greater than ever and there is no place for the inexperienced worker in advertising.

The Question of Training

The mercantile business requires capable, resourceful, trained employees. The worker to be "resourceful" and "capable" should have a good general education, a broad business education, special preparation for his selected vocation, and as much practical experience in this field as can be secured while he is in school.

Time required to develop skills that will not be used immediately can be well spent by the unemployed salesperson in taking business courses which will increase his ability to adapt himself to constantly and suddenly changing conditions, and to make the necessary adjustments. The more thoroughly he is acquainted with business conditions, in general, with the way in which a particular kind of business functions, and with its relation to other kinds of business organizations, the more easily he will fit into business life when he obtains employment.

Positions may be secured through influence, but business men agree that the man or woman who retains the "job" must produce results. As training departments in stores decrease their activities, the prospective salesperson is still more dependent upon the public schools for training. Large retail stores which had thirty to forty young college men

on their payroll a year ago now have six or less. Junior executive training courses for college men have been eliminated because there are no positions for the men when the course is completed.

Educators frequently suggest the need for a course in consumer buying. We learn how to buy wisely and well when we know how to read advertisements intelligently, when we recognize good selling because we have done it or know how to do it, and when we know how stores are organized and how they function. There is no better way of building intelligent sales resistance and wise consumer buying than this.

Present Trends in Commercial Employment and Training

By RICHARD E. RUTLEDGE, Principal
Merritt Business School, Oakland

The Merritt Business School, through its coordination staff, is carrying on a continuous survey of numbers and types of commercial employees, distribution of duties, and requirements for employment. During the past four months, the duties of almost 1,000 commercial employees, from 104 firms representing 70 types of business, exclusive of department stores, have been studied. According to the duties, these employees have been classified according to the employers' description of their work, and according to the actual work performed. The largest numbers fall into three major divisions, as follows:

OCCUPATIONS	CASES
Stenographer	158
Clerk	260
Bookkeeper	158

An analysis of the duties shows, however, that in practically every case these employees are assigned incidental duties. For example, the stenographer does elementary record keeping, substitutes as P. B. X. operator, handles her own filing, and meets the public. The bookkeeper frequently makes collections, operates calculating machines, and types his own reports. The most highly specialized duty found to date is that of the calculating-machine operator. Persons employed under this payroll classification usually have no duties other than those which would be expected. However, at present, other types of office employees are called upon, particularly in smaller offices, to handle calculating machines.

While the economic situation has forced a reduction in the size of the staff of the typical office, the amount of office work has not decreased correspondingly. It is not uncommon to find five people expected to produce as much work in a day as eight employees did formerly. Managers state that even though business returns to normal, they will not need to increase their staffs to the previous size.

The qualifications for entrance into office positions have changed very markedly. The employer now demands entering employees to be of superior personality and native ability, that they be mature and well poised, and that their preparatory training be very thorough and very extensive. The most typical statement of the employer's expectation of a worker is that he be a high-school graduate with two years of commercial training after graduation and not less than twenty years of age.

Concurrent with this increase in qualifications demanded of workers in regular positions has come a decrease in the number of junior positions available compared with regular salespersons, stenographers, and general clerks. The number of messengers, stock clerks, and other junior workers is practically insignificant. There is a very marked decrease in the amount of training offered on the job by the employer. Reductions in budgets have forced the elimination of training bureaus in many institutions.

The implications of the trends noted above for the commercial curriculum are:

1. Specialized vocational training may well be postponed until after high-school graduation.
2. The training program should include a wide variety of skills, since the prospective worker must be ready to accept any type of position that may be open, and since, especially in the smaller offices, every position requires a mastery of all the skills usually developed in commercial-training institutions. In this connection, it might be noted that where office staffs have been reduced, the persons retained have not been those who have specialized, but those who were able to substitute for other workers.
3. School training programs will have to be expanded and will have to provide adequate supervised experience, since the entrance into commercial occupations is no longer that of employment as a junior with promotion dependent upon the experience and training offered within the plant.

The employment outlook is not as gloomy as it was a year ago. The placement office in the Merritt Business School made, during the fall semester, 148 temporary placements and 65 permanent placements. In addition to those placed in commercial positions, students leave the school at the rate of about twenty-five a month, having secured some type of employment through their own efforts. Staffs have been cut so heavily in the past two years that any change that will occur will probably be in the nature of more positions. Although employers are loath to emphasize the situation, it is commonly stated that the less efficient employees will not be re-employed, and that employers will fill vacancies in their staffs with young people between the ages of twenty and twenty-five. Should there be a decided improvement in business conditions, there would be a very serious shortage of trained young workers in the business districts around San Francisco Bay.

Present Trends in the Demand for Office Workers

By ALBERT E. BULLOCK,

Assistant Supervisor, In Charge of Commercial Education,
Los Angeles City Schools

This article is intended to be part of a symposium of opinions regarding the trends in commercial employment and commercial education as affected by present economic conditions. The discussion will be limited to the office-training phase of commercial education, and will include such questions as: (1) Are employers seeking highly specialized office workers or general all-round office workers? (2) Is there a demand for commercial courses for employed workers who wish to add to their present training? (3) Is the present demand for office workers of the lower-salaried,

inexperienced group, or for the older, more experienced group? (4) What, in general, are the trends in office training?

In gathering material for the article, the author consulted the following Los Angeles agencies: Junior Employment Service of the Los Angeles Public Schools; State Employment Bureau; Vocational Service Bureau; Placement Secretary, Woodbury College; Placement Secretary, McKay Business College; Comptometer School Agency; Underwood Elliott-Fisher Machine Bookkeeping School; Burroughs Bookkeeping Machine School.

It is perhaps needless to state that very few office workers are being hired, and those who are hired are often former employees rather than strangers. When a small office finds it necessary to dismiss some of its employees, the remaining workers must ordinarily still perform all of the same functions that were performed before, even though the volume of work may be decreased. The tendency, therefore, is to retain those workers who can perform a variety of tasks. Even large offices follow to some extent this same procedure. This practice, of course, has a tendency to eliminate the highly specialized worker and to retain those workers of more varied ability. When dismissing a worker it is only natural for the employer to place him on a preferred list for future employment. In the meantime, the dismissed worker, if skilled along one line only, usually sees the advantage of adding other skills to those he already has, and thus increases his chance of re-employment.

Is the Demand for Specialized or All-round Workers?

Every official interviewed stated that the present demand, where there is any, is in line with what has been said in the paragraph above; namely, for more broadly trained workers. They still find that specialized skills are wanted, but each worker is required to have several skills instead of only one or two as in former times. A few quotations from those interviewed are given on this point.

The coordinator in charge of the placement of girls, Junior Employment Service, Los Angeles Schools, says: "The requests of employers for office employees at this time would seem to be paradoxical. They require girls with specific training in more than one type of work. For example, a call comes for a good stenographer and typist, with the added requirements that she be able to operate a comptometer or perhaps the P. B. X. board." Another worker in the same service bureau says: "A girl must be a first-class stenographer, bookkeeper, or typist, and then be trained to run a P. B. X board, do filing, use a comptometer, and know how to use a cash register." The coordinator in charge of boys' placement says: "On the whole, I should say that specialized workers, even in juniors, are the order of the day. Typing especially is very often required in office clerks, and many of our calls ask that a young man be well trained in simple figuring so he can do accurate billing, etc."

An official of the Bureau of Vocational Service says: "Our general impression is . . . that employers are consolidating the work in their offices; that women trained for several branches of office work have a much better chance of employment than those who specialize in one branch only . . . This is only an impressionistic statement." The State Employment Bureau, Los Angeles office, makes practically the same statement.

Officials of all of the bookkeeping-machine and comptometer schools stated that many of their calls are for oper-

ators who can also typewrite, and a considerable number require the additional ability to take dictation. The placement secretary of both business colleges stated that practically all of their placements for some time past have been of graduates from what they call the combined course, which includes shorthand, typewriting, bookkeeping, and general office training.

Courses for Employed Workers

Since the demand is for the more broadly trained worker, it is only logical that upon being informed of this fact dismissed workers seek to add more training to what they already have. The managers of both bookkeeping machine schools state that a large number of those who now attend their schools are experienced stenographers and other office workers who believe that their chances of employment will be better if they also know how to operate a bookkeeping machine. The manager of the Comptometer School Agency made a similar statement. The personnel secretaries of both business colleges also state that a considerable number of students are returning to them for additional training.

It is a little more difficult to get this specific information from the public evening schools because, as far as their commercial work is concerned, most of their students have always consisted of employed adults who were seeking to improve the skills they already had or to add new ones.

To summarize this part of the discussion, it is reasonable to conclude that now, more than ever, unemployed office workers should be given an opportunity to add other skills to those they already have.

Experienced or Inexperienced Workers Preferred?

Practically all of those who are called upon to supply adult workers are agreed that the demand is for the best-experienced workers at low wages. The State Employment Bureau emphasizes this point particularly. Cases were cited of highly skilled workers accepting two-fifths to one-half of their former salaries. All are agreed that the salaries offered at the present time are, for the most part, extremely low and the demand is quite consistently for high-quality experienced workers. This does not mean that old or middle-aged workers are being placed. One coordinator states: "It is increasingly more difficult to place the older worker regardless of her versatility and willingness to accept a smaller salary." The fact that so many of the younger experienced people are available doubtless explains this. On the other hand, a limited number of young, inexperienced workers are still being hired by employers who say they are able to pay very little for their help and are willing to put up with the inconvenience of having inexperienced workers. Even these employers, however, ask for a school's best graduates, and those who are trained to do practically everything in an office are given preference.

Tendencies in Training

Unquestionably, the present employment tendencies warrant a school in giving broad office training to pupils now in school, and in keeping its standards of training high. They further point to the need of providing opportunities for employed and unemployed adults to broaden their training and to improve the skills they already have. With the present over-supply of office help, no employer needs either to hire or to continue to keep inefficient help.

Trends in Adult Education

By DAVID L. MACKEYE

Director Adult Education, San Jose, California

Adult education in the United States has gone through three phases. Originally it was designed for the education of immigrants and illiterates. Bills recently introduced in the California legislature seem to indicate that, even in the minds of some well-informed people, adult education is still limited to this phase. About 1924, a second phase emerged, involving an unorganized conception of adult education, as relating to all persons, regardless of civic and educational status. Classes remained, however, on the level of such high-school courses as would be accepted by adults, which turned out to be largely vocational or semi-vocational in type.

In 1926, more definite purposes arose: adult education was conceived as an instrument of the state in producing an intelligent and efficient citizenship and as an institution capable of appealing to all persons. In California today a great variety of adult educational systems represent all three levels. In spite of patient work by the State Department of Education, there is by no means a uniform conception of what adult education ought to be in California. Consequently, there can be no definite statement of trends which will be true of all districts.

Two Lines of Development

The attacks on adult education in the name of economy have thrown the situation into still further confusion. It might be possible to say, however, that in the best-organized departments of adult education, two developments are most noticeable. One is the more purposeful platform of industrial education which is adding the idea of re-training to that of training. More information is needed to direct this re-training into profitable fields.

The second organized development can well be given the title applied to it by L. B. Travers, chief of the Division of Adult and Continuation Education, who classified groups with a community value as "civic-social." More experimentation is needed to solve the problems of this type of education in regard to difficulty of teaching, development of methods and organization of content. Where the civic-social program has been successful, however, two things have been noticed. First, the average age of students has risen. Second, the student groups have become more of a cross-section of the community and the quality of student approaches that of community leadership.

Fundamentals of Adult Education

Any great advance in adult education in California depends upon three requirements:

1. The high-school principal will have to acquire a greater faith in education as a solution to problems both individual and community. His belief must be firm enough to withstand a long period of disappointment in building his program before he is successful.

2. People of all classes must have their idea of education revised, and look upon it less as a matter of years in school, or as credits and diplomas, and more as an integral part of personality.

3. Teachers will have to understand that they must teach more than facts which are learned in school; and they will have to learn how to teach adults. Teacher-training insti-

tutions must aid by departing from the purely inspirational type of instruction in adult education and accomplishing something definite with techniques and procedures.

Effect of the Depression

The depression has not had the influence on adult education one might think. In San Jose it was not until the spring term of 1933, that the unemployed really began to take advantage of the opportunity for adult education. The figures for certain shop classes still indicate that the peak of enrollment is coincident with the peak of employment. This may mean that a man thinks of education in terms of specific problems. When he meets a problem face to face on the job he comes to school to get a solution for it. When opportunity for employment has disappeared, he does not know what to do, and I am not quite sure that we do either. Certainly he does not know how or where to start a new education.

The depression has, however, raised the average age of adults enrolled in school. This is unquestionably true in those districts which have developed the so-called "discussion programs." Men and women over forty years of age are crowding in and, in some cases, are making education their form of recreation. Pitkin's book, "Life Begins at Forty," is a best seller in many cities, and there is other evidence that a progressive school administrator could organize a division suitable to the 40 to 80 age group and render a great service.

Much is being said about leisure time, but we are in danger of substituting words for facts. *The more leisure some classes of people have, the more idle they become.* Our

best students are usually the busiest people. Increased leisure time does not always produce a demand for adult education. The intelligent director will not offer it to fill in a social vacuum, but as a substitute for other and less constructive activities. Otherwise, he will make a mistake.

Lodge and fraternity life is not so active as it used to be. Reduced incomes eliminate much commercial recreation; it is difficult to sustain memberships in country clubs, gun clubs and other time-consuming organizations. An academic or formal program of adult education is not a substitute for these, but if it can be a vital and socialized program which hits facts and hits them hard and fearlessly, and which will be honest as well as brave, it may become the greatest force in modern life. And, definitely, it may not. Adult education will not develop without leadership. The burden of responsibility is often placed upon men who are too busy with other duties to work this problem out.

Many problems are agitating the directors of adult education. The question of tuition fees is most pressing. The legislature is faced with a demand to make all adult education self-supporting, a heartless attitude towards the unemployed man and woman. The tendency in northern California already is to charge from \$1.00 to \$3.00 a semester registration fee. In southern California the departments have rather avoided fees. It is believed, however, that some form of tuition will become a necessity as adult education becomes more universal, but the principle of the capacity to pay should be carefully preserved. No individual should be barred from the opportunity of becoming a better individual simply because he cannot afford the training.

Service to Industry

By LESLIE G. STIER

Assistant Supervisor Trades and Industries, Vocational and Prevocational Education Section, Los Angeles City Schools

Much has been said about organized training programs which are carried on in a school building, but very little has been said about organized training programs as conducted in industry. Training programs of the type that offers direct industrial educational service to industry in cooperation with local and state educational authorities have been going on for some time.

There has also been considerable misunderstanding with regard to trade-preparatory classes for the training of young men and women for a trade. Many people think that educators organize any trade at any time. Few people realize that in vocational training the organization of a trade class requires the cooperation of representatives from industry, labor and education. Establishment of day preparatory trade classes requires a considerable amount of previous thought and preparation.

Our evening industrial classes reflect the demands of industry. The entire program, to be effective, must be approved by industry and by industrial workers. Each must show a need for this training before any class can be established. All classes are organized into short units. At the conclusion of a short, intensive training period industry has a better employee, and the employee has a better job.

The most important item in any industrial organization is its force of well-trained, competent men. Efficient men with years of successful, practical experience are the back-

bone of every industrial concern, yet, all of this valuable, practical background may be lost unless the firm capitalizes upon it. Practical men quite often are reluctant to express their own opinions or to make worth-while suggestions which would benefit the firm; therefore key-men, or leaders in industry, must be familiar with the methods which are used to obtain this valuable information. Industrial magazines are filled with articles discussing the need for conducting conferences with groups of men in industry. The training of leaders, or key-men, in the plant for the purpose of obtaining more intelligent and efficient leadership has been demanded by industry. An efficient, industrial-education training program can render such service to industry.

Training in Industrial Plants

Realizing the value of this type of training, industries and other organizations in Los Angeles have asked the cooperation of the State Department of Education and local vocational educational authorities to organize a series of conferences in company plants. To meet industry's demand, conferences were held in various Los Angeles plants.

Scarcely had the first conference been completed when demands were made by other industries and organizations for a series of these conferences. As a result, conferences were carried on in a variety of industrial and community organizations. A record was kept of all the work accomplished. As soon as one conference was completed the re-

sults were sent to industries engaged in similar work. To appreciate fully what has been done in plant training it might be well to list the organizations which requested and received help in training foremen and leaders in their plants. The following list of organizations was affected by these conferences:

Union Pacific Railroad
 Training of Foremanship Conference Leaders in Cooperation with Manufacture and Industries Committee, Los Angeles Chamber of Commerce
 First series
 Second series
 Retail Meat Dealers' Association
 Southern Pacific Railroad
 Automotive Reconditioning Association
 Grayson Heat Control Company
 Paul G. Hoffman Company
 Printing Industry
 Brake Service Business
 Howard Automobile Company
 Tile Industry
 Angelus Furniture Company
 Los Angeles Fire Department
 The Texas Company
 Los Angeles Police Department

Conferences with the firms listed above were made possible through the cooperation of the Federal Board for Vocational Education, the State Department of Education, and the Division of Vocational Education, Los Angeles. Results have been highly gratifying. In every instance the organizations have taken a keen interest in this work and have expressed appreciation of the service rendered.

Day Trade Classes Render Service to Industry

At the Frank Wiggins Trade Day School 64 different trades have been organized with an enrollment of 2,000 students. These courses are established for the purpose of giving practical trade training to carefully selected students so that these students will be trained for profitable employment in industry. The establishment of day classes is never considered until a demand in writing is made by representatives of industry and labor. After this demand, representatives of industrial education make a further careful survey to determine if the training requested is a worth-while training program for the community. Educators, alone, do not determine the courses given in the trade school. To keep in constant touch with the needs and demands of industry, advisory committees representing the various trades have been organized, and these committees give the necessary information and guidance for establishing and carrying on industrial-training programs. Representative men from industry act in the capacity of advisors for the following trades:

Aircraft Drafting	Mechanical Drafting
Alterations	Millinery
Architectural Drafting	Painting and Decorating
Auto Electric	P.B.X. Operators
Auto Mechanics	Plastering
Body and Fender Work	Plumbing
Bricklaying	Power Sewing
Building Operation and Maintenance	Printing
Cabinet Making	Radio
Carpentry	Sheet Metal
Commercial Art	Sign Painting
Commercial Lettering	Soda Fountain Work
Cosmetology	Spotting and Pressing
Dressmaking	Tile Setting
Electricity	Upholstering
Food Trades	Welding
	Window Display

The above list is represented by an advisory group of about 130 men and women, engaged in industrial work, who are ready to advise and guide in the conducting of industrial training at the Frank Wiggins Trade School. The instructors in this school are all from the trade, the majority having had more than ten years of experience in the trade they are teaching. Instructors, before being accepted, are approved by the advisory committee representing their trade.

Special attention is given to the selection of students. Applicants must show aptitude and fitness for the work. A fine group of industrially selected students who are of the right age to learn a trade are enrolled in the school. They want to work. By providing training for a reasonable number of these young mechanics during times of unemployment the schools are keeping them off the labor market until conditions improve.

The program of industrial education in Los Angeles is not a one-sided program. It is the best thought of representatives of industry, labor, and education. After all, these groups all "stand pat" on one point: the giving of organized training to selected groups who need it, when they need it, to the end that Los Angeles may have well-trained and civic-minded craftsmen.

Evening Industrial Classes Render Service to Industry

Only a short time ago members of the automotive industry complained that their auto mechanics lacked an understanding of how to make brake adjustments and do auto wheel-alignment work. The making of brake adjustments and the aligning of wheels is rather a highly specialized trade, but any skilled auto mechanic should be able to do some of this work. Where can an auto mechanic get a short, intensive training in this line? The Frank Wiggins Trade Evening School is organized to render such service. The demand for this training came, in the first place, from industry. To be sure that a sufficient number of mechanics were informed of the contemplated classes, notices were sent to garages. When there was sufficient evidence of a demand on the part of industry and mechanics for them, short training units in brake adjustment and wheel alignment were established. Only auto mechanics are allowed to enter these classes.

Another excellent example is refrigeration. Electrical and gas refrigeration is a comparatively new industry. On investigation it was found that men who were working with refrigeration and electricity were often called upon to make repairs on electric and gas refrigerators. Not only did industry need men specifically trained in this new field, but the mechanics, also, felt the need of such training. So, by the agreement of industry and workers, a short, intensive evening course in refrigeration was established. This class was restricted to men who needed training for work in refrigeration.

This year the Frank Wiggins Trade Evening School is offering 68 different short-training units of industrial instruction to approximately 2,000 industrial workers. This evening trade school has, in its files, a list of 635 different firms in Los Angeles from which workers are coming for definite, intensive evening instruction in jobs which will help them in the performance of their daily work.

A picture of industrial training in Los Angeles shows an army of 2,000 carefully selected young apprentices, backed

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PRESENT LEGISLATION AND VOCATIONAL EDUCATION

It is encouraging that the United States Senate, during the last week of the session, concurred with the House in refusing to decrease the permanent appropriations to the

states. This includes the Smith-Hughes fund which is so vital to our program of vocational education. The people of California will in turn not wish to lose this fund from their state by amending or repealing the sections of the School Code relating to the vocational-education fund, as presented in Assembly Bills 1843 and 1844 presented by F. M. Roberts of Los Angeles. It is important that every school district make known to its senators and representatives the fact that the Smith-Hughes fund must not be touched.

Assembly Bills 33 and 304 and Senate Bill 77, bills relating to compulsory attendance upon special continuation-school classes, must be considered as originating from a mistaken view of economy. Aside from our social obligation to youth, it would be folly to throw upon the labor market several thousand more young people seeking employment.

It would also be folly, for the sake of economy, to send back to the full-time school the young people who are now attending the continuation schools, causing these schools to make expensive readjustments in their curricula. And it would be still greater folly to throw out upon the streets unemployed youths at this most critical age, between sixteen and eighteen years. The continuation schools are a public safeguard against the dangers caused by unemployment, unrest, and the unprofitable use of idle hours.

Again let your legislators know that your community values the continuation school for its young people to the age of eighteen years.

The Place of the Technical Institute in California

By CHARLES E. KNOTT

Director of Industrial Education, California Polytechnic School, San Luis Obispo, California

The industrial institute departs somewhat from the traditional form of education. The students who are usually recruited are high-school graduates. The training carries them two years beyond the high school in formal training within the school, and frequently for one year after leaving the school, although placed in industry, their progress is watched carefully and their education continued. The technical institute has a close contact with industry and the work given the students while in the school has a direct tie-up with the industry. In other words, students are prepared for a particular job or field of employment in a particular industry and are placed on that job.

Although purely theoretical work is left out of the technical-institute training program, the students are given enough scientific background and fundamentals dealing directly with their vocation in order to have a sound foundation upon which to advance after entering industry. They are definitely taught to do one thing and to do that well. They enter the industry at a lower level than the trained engineer, but it is possible for them to advance rapidly to a place between that of the ordinary workman and the engineer. They realize that they must begin at the bottom and work for promotion.

In the educational system of the state the California Polytechnic School has taken up technical-institute work. It takes the students where the high school leaves them, and places them in industry in from two to three years. At the present time this school is offering training in five major

lines, and this training is conducted as nearly as possible on the basis of actual work conducted in industry.

In the aeronautics department the shop work is done on a strictly commercial basis, supervised and finally inspected by representatives of the U. S. Department of Commerce. The students may specialize in either of two main branches—airplane mechanics or airplane-engine mechanics. In either of these branches the students are prepared to take government examinations which will grant them a license to operate as mechanics. The shop is conducted as a regular work shop.

Under the department of building construction three major courses are offered, for the draftsman, estimator, and inspector. Here again the class work and drafting-room work are conducted upon live jobs as the work would be conducted in an architect's or builder's office. Small house plans are drawn; plans for larger buildings are brought in and material surveys of them are made. The students make detailed drawings from sketches or from the architect's drawings of buildings. Related work is given in the fields of science, English, and mathematics for well-qualified workmen. The instructor in this work is an outstanding architect who has an enviable record among his fraternity on the Pacific Coast.

The electrical department is conducting training courses in industrial control engineering, armature winding, motor repairing, and training for the operation departments of the public-service corporations. The shop work for electrical students is conducted, as far as possible, on a commercial basis. However, there are certain purely training situations which must be artificially produced in order to give to the students, in a short period of time, a wide variety of experiences which will qualify them to develop after they leave the institution. Related work in drafting, mathematics, and English are given to the electrical students, aside from the classroom work or theoretical instruction relative to electricity. In this department students have the opportunity to meet two very different types of men as their instructors. The shop man has had a wide experience as a workman in all kinds of electrical fields, ranging from inspection for one of the large cities to mine electrician for a large copper-mining company. The classroom instructor has had many years of experience in teaching electrical subjects in technical schools and colleges and universities. He has a very wide experience in the theoretical side of electrical work as well as a background of engineering experience as a consulting engineer and as an expert with public-service corporations.

In the mechanical-drafting department the students are first trained to the fundamentals of drafting, commercial drafting-room practice, and the essentials of accurate, neat work. As soon as they master the fundamentals of drafting, their originality is developed by bringing in from the shops specific drafting and design problems. These problems are chosen to fit the ability of the students. Many are live jobs to be built in the shops as soon as the drawings are completed. If errors in drawing or design are discovered during construction the drawings are returned to the drafting room for correction, thus placing the drafting on a purely commercial basis.

The work offered by the surveying department is quite unique. There is no attempt on the part of this department to "produce" civil engineers. The main course in surveying is broken up into three parts, and the students may special-

ize in any one of these: highway work, municipal surveying, and land-subdivision work. There is also a land-leveling and irrigation course. The training is given, as nearly as possible, under actual working conditions. The students are assigned problems in their field of work which are carried through to completion so far as the surveying, mapping, and drafting part of the work goes. There is plenty of room and a variety of terrain on the campus so that all phases of the work may be offered in the field. The instructor in this work has had years of experience both as a teacher of surveying and civil engineering subjects in technical institutes and colleges, and has a broad commercial experience in land leveling, irrigation, construction of concrete dams, and highway work.

The students for these courses are chosen from the high schools of the state on the basis of their adaptability as well as their interest in the work. The first selection is made by a personal interview with the coordinator who, as far as possible, will attempt to interview the students before they have completed their high-school course. Then, after starting upon their training in the California Polytechnic School, the work of the students is carefully observed for adaptability. If, at any time, it appears that they will not fit into the surroundings a change is suggested.

Along with the careful selection of students the school conducts a placement and coordinating service. The coordinator, in his contacts with industry, brings in first-hand information which is used in adjusting the courses to meet commercial needs. He also arranges for the placement of the students who have completed their two-year course at the school. Mere placement is not the end of the school's responsibility to the students. They are kept in continual contact with the school for a period of one year and if, at any time during this period, their training seems to be inadequate or they are not successful in their work, they may be returned to the school for further training.

It is the plan of the school to add courses from time to time as there is a demand for them by industry. During the past twenty-five years that students have been going out from this school they have entered into the industrial life of the state to a very marked degree.

In the surveying field they range from rodmen to party chiefs on highway survey work. In municipal and land-survey work they have a similar distribution from working as rodmen to conducting an office of their own. The electrical students have been successfully placed with public-service corporations as well as in industrial work and with contractors. Many graduates in the drafting field have entered directly upon employment in drafting offices of manufacturing companies and have passed high in civil-service examinations, securing employment with the state.

A survey of the technical institutes in the United States, conducted by the Society for the Promotion of Engineering Education, the findings of which were published in February, 1931, points out that there is a demand in the manufacturing industries as well as in public service corporations and transportation companies of from 2.6 to 3 times as many technical-institute men as college graduates. This is true in spite of the fact that at present there are six times as many men graduating from the engineering colleges alone in the United States as there are graduates from all of the technical institutes. Such facts lead us to feel that the California Polytechnic Institute will continue to be of great service to the state.



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Prominent Educators Talk at Conference

The semi-annual conference of the California Industrial Education Association, held Saturday, December 3, in Glendale High School, was attended by nearly five hundred industrial-arts teachers from all sections of southern California. The general meeting, held in the auditorium at 10:30 o'clock, was in charge of President Claude Nihart. Mr. R. D. White, superintendent of Glendale City School District, delivered the address of welcome.

The principal address of the morning session was delivered by Dr. Frederick Woellner, department of education, University of California at Los Angeles, who talked on the subject, "How much can we learn after forty?" Dr. Woellner emphasized the belief that man's ability to learn after he has reached the age of forty is limited only by his own ambition and desires. Man, at that time of life, stands upon the threshold of the "golden age," and if he chooses to lie back in the harness, saying, "What's the use?" he is not only "passing out," mentally, but he is becoming very much alone, as the modern trend of education looks not only after the welfare of the youth, but also is being more and more devoted to the needs of adults, a vast number of whom have reached forty years of age, and more.

The morning session concluded with the election of officers, Mr. Nihart being unanimously re-elected as president. Luncheon was served to about four hundred members of the association in the school cafeteria. Dr. Frederick Horridge, coordinator of vocational education of the Long Beach schools, was toastmaster and, after introducing various educators, presented Paul Webb, vice-principal of the Huntington Park schools and member of the Carnegie Foundation Committee, who spoke on "The Effect of the Committee Report on the Schools of California." Among the most important facts brought out by the report was that a multiplicity of boards for schools above secondary level are working a hardship not only on the taxpayer, but also upon the educational system in general.

The afternoon was given over entirely to group conferences in which teaching methods and problems were discussed. "Terminal Courses for Girls in the High School" was the subject for study by a group under the leadership of Mrs. Ethel H. F. Moyse, vice principal of Glendale High School while teacher-training problems were discussed by the teachers meeting with Benjamin W. Johnson, assistant director, Division of Vocational Education, University of California at Los Angeles. Adrian D. Keller, of the mechanical arts department, U. C. L. A., addressed one conference section on the topic, "Is the Industrial Arts Program Justified?" Mr. E. E. Ericsen, department of vocational educa-

tion, Santa Barbara State Teachers College, spoke on "Integration of Industrial Arts with Academic Subjects." Theodore Woolsey, president of the Aeronautics Teachers Association, was chairman of the aviation group; Mr. A. L. Ferguson, principal, Herbert Hoover High School, Glendale, led those interested in vocational guidance; Mr. George Henck, director of vocational education, Pasadena City Schools, was chairman for the discussion on, "Terminal Courses in Junior College," and Foss R. Brockway, associate in mechanical arts, U. C. L. A., led those members whose subject was "Junior High School Industrial Arts Problems." Roy Soules, director of vocational education, Santa Barbara, had for his group the subject, "Trends in Industrial Arts." Teachers taking part in these various conferences were enthusiastic in their praise of the way in which they were conducted and of the results obtained.—J. R. E.

Noted Fliers Talk

The Aeronautics Teachers' Association held a meeting in Glendale, Saturday, December third, in connection with the semi-annual convention of the vocational teachers of the Southern Section. Theodore Woolsey, president of the association, presided at the meeting.

Colonel Arthur Goebel was the guest of honor. He spoke of the development of the Diesel Engine for airplane propulsion, and answered questions about that type of aircraft motor. Dudley M. Steele, aviation director of the Richfield Oil Company, talked about air transportation and the National Air Races. Earl W. Hill, professor of aeronautics, University of Southern California, spoke on the subject, "Aviation and Economics," and Randal Irwin, editor of Western Flying Magazine and secretary of the National Aeronautics Association, had as his topic, "New Developments in Aeronautics."

Central Section C. I. E. A. Meets

Members of the Central Section C. I. E. A. met at Selma, Saturday, January 21, as guests of Selma Union High School shop teachers. The entertainment features at the dinner meeting were an illustrated lecture by the field representative of Boeing Air School, and an address by I. H. Teilman, engineer for Selma Irrigation District, who talked about the Hoover Dam project, which he had recently inspected. His talk was very instructive and interesting.

During the afternoon regular business was transacted and plans for better instructive methods were studied. Robert E. Gilbert, coordinator at California Polytechnic School, San Luis Obispo, was a visitor and, by invitation, described the educational program of that institution. He gave, also, the latest news of the California Vocational Federation and of federated associations whose meetings he had attended.

A previous meeting of the Central Section, C. I. E. A. had been held at Fresno, November 22. John R. Alltucker, of Vallejo, the guest speaker talked on "The High Calling of Vocational Education." At this meeting officers were elected for the ensuing year as follows:

President—F. C. Suiter, Tulare.

Vice-president—G. I. Kralowec, Porterville.

Secretary-treasurer—F. A. Marcellus, Hanford.

The Central Section has three locals, with headquarters at Merced, Fresno, and Bakersfield, respectively.

Vocational and Industrial Arts Association Holds Dinner

By J. C. BESWICK, Chief

Bureau of Trade and Industrial Education, California State Department of Education

On the evening of December 21, 1932, the annual dinner of the Los Angeles Vocational and Industrial Arts Association was held at the City Club, with about three hundred vocational and industrial arts teachers and their friends in attendance. Harry H. Baskerville, president of the Los Angeles Board of Education, toastmaster for the banquet, presented the participants in a very interesting and instructive program. The musical numbers, which were arranged by Mr. Ray Casey, included entertainment by "Huck and Tom," two boys from the Alexander Hamilton High School; ritual dancing by some Indian boys from the Sioux and Hopi tribes, students at the Sherman Institute; and orchestral selections by some talented students of the Alexander Hamilton High School. During the banquet, tableaux and demonstrations of the various trades for which vocational training is offered in Los Angeles, particularly at the Frank Wiggins Trade School, were presented very cleverly.

Following the dinner the toastmaster introduced the guests of the evening—members of the State Department of Education and of the Los Angeles City Schools Department and finally State Superintendent of Public Instruction, Vierling Kersey, who was announced as speaker of the evening.

Superintendent Kersey extended his hearty greeting to the group, complimenting the association upon the splendid gathering, and expressing his delight at being present. He presented the greetings of other groups of vocational teachers meeting throughout California, and from the State Department of Education. Such associations are reporting better attendance and more enthusiasm from their members than usual, and seem to be more aware and concerned with their problems.

Dr. Kersey told of his experiences while in attendance upon the recent convention of the American Vocational Association, held at Kansas City. The keynote of the convention, at which 1,102 delegates were registered, seemed to be a realization of human values, and the need for their conservation during this period of depression.

Superintendent Kersey's address to the group was very inspiring. He said, in substance:

There is a new sort of pioneer spirit that is current and observed in the United States—pioneer being synonymous with progress. That spirit has developed a strength which has given us power for mastery; and that strength at the present time lies in the power of the common people—that group of people in the United States that has, heretofore, been more or less non-assertive—that has been more or less removed from the leadership or power that has been given recognition. The result of the recent election is an expression from that group which goes to show that it is a tremendously powerful group. It is not at the present time conscious of its power; it is not at the present time organized to use that power. It is rather susceptible to emotional appeal, to individual citations of the difficulties of the problems facing us, and their possible solution. It tends to act suddenly and surely in terms of the immediate situation.

Probably education senses this as much as does any other function that society performs for itself. Probably vocational education is closer to these common people than general edu-

cation and, consequently, holds much more than the balance of power at the present time. What can we do with it is probably not so important as, what are we going to do for it so that it will properly do for itself?

Vocational education, like adult education, is opening the eyes of general education. General education is turning to vocational education because it is pretty hard to get the "do" in general education, and so general education is leaning upon vocational education for strength. The strength of vocational education was shown last spring when 1,000,000 telegrams were sent to Washington in protest against proposed legislation to abolish Federal participation with the states in the aid for vocational education. General education needs to get this strength of pioneer zeal that is with the common people.

Education sees that it has to do something about unemployment. There is only one cure for unemployment, and that is employment. Most of these people in order to be fit for employment must be re-trained. Re-employment for them, therefore, means re-training.

The large army of the unemployed have had not only their jobs, their money, their food, their shelter, taken from them, but their morale is "shot." These people have lost their faith in a social structure that seems not to have a place for them other than to give them a "dole." They have lost their faith in government. They are losing their faith in anything supreme. This indicates a job which must be accomplished.

There seems to have been some shirking of responsibility in vocational education, as administered by superintendents and principals. Courses have been scrapped and equipment abandoned which should be in use in order that the investment may not have been made in vain. Improvement must be made in this field of education, from within the ranks, which must also prove to be an improvement for industry.

In the past we have been trying to determine "What is education?" We are now more concerned with "What educates?" At the present time we are trying to answer the question as to whether education is a function of government or whether it is a function of society. This is a question which involves many things.

Society is demanding much more subject matter and greater life matter from education; and that we answer this question: "What is the correlation between education and employment?" Is there the correlation between these that there should be?

Vocational education must sense the fact that in this society of ours there is the most highly sensitized economic nervous system that these United States have ever had. Such a highly sensitized nervous system is particularly keen in periods of unemployment when our surplus and savings are consumed.

These are all problems of our educational program, and vocational education has an important responsibility in aiding in their solution. The zeal, the vigor, and the strength of our program must be maintained. There is no phase of education that is so dynamic, nor one so filled with self-sacrifice, and with the missionary attitude, as vocational education.

In conclusion Superintendent Kersey said, "The rugged, restless zeal of our vocational teachers will be the pioneer spirit in American education. It will stabilize all our educational structure."

The Demand for Vocational Training

By FLOYD R. LOVE,

Director of Vocational Education, Stockton, California

It is very gratifying in these times of economic stress, to find so many young people (with the help of their parents) making definite plans for their future ability to earn and to get steady employment as soon as this period of depression is over. Never in the history of the vocational work in Stockton have there been so many young people making application to enter classes for vocational training. The demands have far exceeded the possibilities of accommodation. These young people are nearly all planning to stay in vocational courses for their full duration of training. There are many students applying for post-graduate work who cannot be enrolled. Nearly all of those who cannot be accommodated in other classes register for work in the continuation school, and take courses that have a direct relation to the occupations for which they have prepared.

Attendance in the vocational work not only contributes towards helping those who wish training for future work, but also it aids those who are now employed by keeping this large group of young people off the labor market. It also keeps the group of prospective young workers thinking about something constructive during this time of social and economic discord. If they were idle on the streets with nothing constructive to do or think about, the disastrous results would be immeasurable.

Chances for young people to obtain employment are becoming less and less each year. Even with the return to normal times, they will still find many difficulties in securing employment. The age limit for entrance into employment is gradually being raised. The shorter working day and week which have been advocated to keep the adult workers on the job will, of course, contribute little towards juvenile employment.

Because of the limited fields of employment for young workers, the years of attendance in school must be increased if our youth are to be served. Proper care means more than giving them academic opportunities in our school department; it means considering individual needs, capacities, interests, and abilities. The proper consideration of these factors means the setting up of work of such grade and character that it will function properly for all concerned.

The vocational courses in our public schools contribute much towards a broad educational service, because they give proper consideration to individual interests, abilities and capacities; they induce students to think constructively about themselves and about the service that they can render society; and they extend the interests of students in school by giving them a chance to express themselves through the work they see being done in the world about them. In all of these ways they form habits of work and cooperation that cannot be equalled in any other kind of school course.

The industrial concerns of Stockton have always recognized these values. Until the last two years it has been possible to place all graduates of vocational courses with these concerns. Even in this time of economic stress, some of our graduates have been placed in the vocations for which they have been trained. In no instance, however, have they taken the place of an adult worker.

Keeping boys and girls interested during their high-school work and getting them a job afterwards, means a great deal, not only to them, but also to the whole community in which they are living. In looking over problems of juvenile delinquency in our city, we have never found in the juvenile court a young person who is a graduate of our vocational courses.

This is indeed an argument in favor of catching young people's interests as early as possible along vocational lines. It is not only an economic advantage to a community, but it is also a great benefit to the craft for which these young people are being trained. They are a highly selected group of workers and will always contribute toward raising the standards of their craft.

The vocational work in Stockton is meeting a definite educational need. It has grown rapidly since its inception but at present is unable to take care of the large group of young people who desire its services.

Service to Industry

(Continued from page 25)

by an advisory committee of 130 industrial representatives, who attend school during the day to receive training in 64 different trades; and an army of 2,000 recognized industrial workers in 68 different trades, backed by the 635 firms who employ them during the day, who attend school in the evening. It can readily be seen that the entire industrial-education program has to do with the betterment of the industry and the worker, which, of course, means nothing more than the building up of the community.

Appreciation of Cooperation

It would be impossible to conclude this article without mention of the cooperation of several groups. The State Commission for Vocational Education is constantly promoting this type of work. The Manufacture and Industries Committee of the Los Angeles Chamber of Commerce has been actively interested in the Frank Wiggins Trade School since its inception. The entire manufacturing group has given this school whole-hearted support, advice, and valuable time. The representatives of labor have also taken an active part in the training of workers. These facts show that the community is deeply interested in developing a high grade of skilled, intelligent workers.

Child Training Laboratory Aids Home Economics Teacher

By VERNA M. TEMPLE, Vocational Teacher Trainer,
In charge: Child Training Laboratory, Homemaking Department, San Jose State Teachers College.

One of the first evidences of the effectiveness of the child-training program is its marked influence on student teaching. The recent experience of one student teacher illustrates this influence. When she began her work with junior high-school students she told them about a typical day in the children's laboratory. She stressed suitable equipment and habit development for young children and found the girls immediately interested and eager to know about the training of young children. Thus the day's activities in the children's laboratory served as a good approach to child training. On another day this student teacher, after exhibiting children's clothing from the child-training laboratory, aroused the interest of the girls

in children's clothing. She found, too, that her bulletins and other source material from the child-training laboratory could be put to very good use in her junior high-school classes. Such reports show that the child-training laboratory serves a worthwhile purpose in guiding student teachers.

The course in child training offers a real opportunity for self-analysis and personality development on the part of the student through conferences, and indirectly through her contacts with children. She often becomes aware of some of her own personality difficulties and their cause as she observes the children with whom she is dealing, and the manner in which they are guided in a satisfactory adjustment to their environment.

The student teacher is encouraged to be well groomed, to speak to children in a pleasant, well-modulated voice, and to select and use the techniques of guidance which best meet the needs of the pre-school child. As she puts into practice such techniques as friendliness, as helping the children to see the humor in a situation, using praise, and giving children reasonable explanations to their questions, she begins to see more clearly what it means "to get along with other people."

The food and nutrition division of the child-training course offers the student teacher an opportunity to put to use her previous courses in these subjects, and provides her with teaching materials of considerable value. The student teacher gains a new attitude toward children's food after she has actually planned, prepared, and eaten the meals served to the children of the laboratory. She learns, from first-hand experience, foods that are suitable for children, food preferences of children, and the influence of flavor, color, texture, temperature, and

arrangement of their eating tastes. She learns about suitable food portions and good eating habits. Many student teachers when eating with children have tasted, for the first time, spinach, broccoli, liver, scrambled eggs, and lima beans and have found that they actually liked these foods! The change in habits and attitudes will have no small effect upon their future work as teachers of foods and nutrition.

The various aspects of the health program in the laboratory serve to make the student teacher aware of the necessity of periodic attention to health. No student teacher is allowed to remain in the laboratory with a cold; this one restriction, alone, makes her realize that she must be physically fit for her teaching so that she will not impose extra duties on others. Additional health measures, such as the use of paper handkerchiefs, the frequent washing of hands, the drinking of water, the attention paid to the wearing of wraps, and the regulation of room temperature and ventilation should all serve to guide the student in her own teaching.

The student teacher also attends the parental education meetings and participates in them, so has an opportunity to observe the organization and conduct of such a group. The daily informal conversation of the instructor and parents will give the student teacher an insight into parental problems and attitudes, and an appreciation of the teacher's position as a sympathetic and interested advisor.

Through this rich and varied experience in the children's laboratory we hope that student teachers will gain an appreciation of childhood and its needs, and a knowledge of some of the necessary skills and attitudes which will be of value to them as future parents as well as teachers of home economics.

Home Projects As Part of Homemaking Instruction

By DOROTHY SHANK,

Regional Supervisor, Homemaking Education, State Department of Education

Home projects are becoming an accepted, important, and integrated part of homemaking programs. They have vitalized the instruction and removed it from the limitations of laboratory situations and problems into home situations and home problems. Home projects have necessitated the interest and cooperation of parents which cannot but prove an aid in any educational program. They have not only enlarged opportunity to carry out a program of growth and development along material lines, but also have afforded the best possible opportunities for social and character development.

At the present time, home projects are keeping step with economic needs and it is interesting to note that those projects which involve the least expenditure of money and which make for the greatest returns to the family group are most popular.

In one of the high schools in the San Joaquin Valley, all of the girls in the homemaking department are showing great enthusiasm for vegetable gardening. They are surprised and happy to discover that they can make a contribution to the production side of the family budget. Spading and even plowing are under way and, in some instances, seeds have already been planted. Garden plots vary in size from the tiny ones at the back of the city lots to large farm-home gardens. The latest report from this school is that the girls have asked the teacher to be ready to give them every possible method of serving vegetables, since, after their strenuous efforts to produce them, the girls feel that no one vegetable can be wasted.

Then, too, some of the members of the families must be taught to eat certain vegetables. The girls have forgotten that only a short time ago the teacher was testing her powers of ingenuity to get these same girls to include a greater variety of vegetables in their diet.

In many schools the planning of adequate diets at a minimum cost is found to be the central interest. One girl has assumed the responsibility of a unique problem—a diet for her father who is suffering a generally bad physical condition due to the absorption of poisons from abscessed teeth. He has now had the teeth extracted, so that this diet problem involves foods not only for an impaired digestion, but also of a soft enough consistency to be easily eaten during his convalescence.

Among the gratifying results of instruction by means of a home project are the permanent and the cumulative values. Once a girl has carried a program through to a successful finish she becomes not only a defender of it, but also a promoter of further ventures.

A first-year high-school girl, who came from a large family, housed in a small home on a farm that was barely holding its own, wanted very much a room of her own. She was given permission by her family to make over a porch as a home project. By the end of the year the porch was screened in and curtained with burlap. A cover of burlap was made for the couch-bed, a dressing table was made of boxes, and rag rugs were made for the floor.

Last fall a girl announced to the homemaking teacher that she was going to help her brother furnish his new room. This high-school boy had purchased building materials from a neighbor who had wrecked a building and, under the direction of the shop teacher, is building a room. The girl is receiving helpful suggestions for furnishing the room from the homemaking teacher.

Another project which was started last year and which brought new interest and beauty to the home of one of the pupils is still growing. The girls of a class were one and all interested in projects that would improve the home yard. One girl came from a farm home that is suffering from shortage of water. The family, anticipating the time when they could afford a well, had left a large space of ground for a flower garden. Through the resourcefulness of a homemaking teacher, a garden has been planted in this yard which is one of the show places of the town. This teacher had seen some cactus plants rooted in rusty tin cans at the back of the farm yard. On inquiry, she found that the father was interested in cactus plants and had gathered them from time to time. It requires only a few words to describe the results of much hard work. A mound of earth, two or three feet high, was piled on one side of the yard and then sloped gradually to the ground level. Hills, valleys, depressions and small level places were outlined with peculiar pieces of volcanic rock; then some fifty or more small cactus plants of different varieties were scattered over this area. At the time the teacher helped with the cactus gar-

den she learned of the deep yearning that the mother had for a flower garden such as she had had in the east. As an outcome, a plan has been made for landscaping the yard even before the water is available. A hedge and evergreen shrubs that require very little water have been planted. A rose arbor has been planned and the frame work is being made. As trips were made afield to gather cactus plants, flat rocks were also gathered, and these now form stepping stones leading around the house, and from the road to the front door.

Successful home projects have revealed the fact that a cause once sponsored by a daughter in a family may be inaugurated into the household with little assistance from the parents. One father reported that a badly used porch had been painted and otherwise improved by his daughter. Immediately the girl assumed relentless vigilance of the porch. On rainy days she stood by while the younger children cleaned their shoes before venturing across the porch. Furthermore, her attitude toward children and her methods of dealing with them had been greatly influenced by lessons in child care at school.

Another parent reported that a young daughter, having assumed the care of the living-room, had broken herself of the habit of leaving wraps and books on chairs and tables and that she had then assumed the responsibility of training her brothers to hang up their caps and coats.

These home projects which are becoming so integrated a part of the homemaking program are planned, discussed, and supervised as a part of the regular class work in school.

Recent Books of Interest to Home-Economics Teachers

By RUTH H. PARKER,

Regional Supervisor of Homemaking Education, State Department of Education

Referring to one of the most recent books offered as a high-school home-economics textbook a teacher remarked, "I just can't keep that book on my desk. The girls are so eager to read it that there is a waiting list for it. They say it is as entertaining as any story and doesn't seem like a textbook."

What is the content of these new books that causes both students and teachers to classify them as fiction? Have the authors presented the traditional subject matter in a new and interesting disguise? Have they approached this subject matter from the standpoint of girl interests and activities rather than in the so-called logical method? Perhaps they have caught a gleam of light that showed them how very broad the field of homemaking could be. Perhaps they have realized that the new economic order calls for a new type of content if home economics is to continue as a necessary part of the high-school curriculum.

Before examining some of the new books, it is well to take stock of the present homemaking library. The approved objectives of homemaking education apply also to the library. A teacher may well ask herself these questions: Have we a well-balanced library—one containing material on all phases of homemaking? Evaluated in terms of an up-to-date course which considers broad content, presented from the point of view of girls' activities and interests, how does our library rate? Can the material in the homemaking library be made to meet the needs of the new economic status of large numbers of girls? Is there material in the files for a course which will offer to the families represented in our classes solutions to problems of readjustment to a lowered wage scale and increased leisure time? An evaluation of the library through

these questions will indicate such supplementary material as may be needed in the homemaking library.

This may seem the wrong time to advocate new books when budgets have been reduced to the minimum; on the other hand, home-economics teachers were never in greater need of the type of material that gives less emphasis to housekeeping skills and more to an understanding of the permanent values of homemaking. To teachers who do not have source material of this type, perhaps one or more of the following books will be suggestive.

For those who desire a new approach to the teaching of foods, "The family's food," by Lanman, McKay, and Zuill, J. B. Lippincott Company, publishers, offers a new arrangement of material. If teachers evaluate instruction in foods by the amount of improvement in food habits of the students and of others in their families they will receive help from this book in which emphasis is on food selection rather than food preparation. If the homemaking course is tested by the amount of home participation of the students the teacher will find suggestion for home practices and projects in "Foods and home making," by Greer, revised, Allyn and Bacon, publishers, 1931.

If a new practical guide for proficiency in sewing is needed, "From thimble to gown," by Van Gilder, is offered as a technical manual of sewing, published by Allyn and Bacon.

If the teacher's objective is to help students acquire right attitudes toward homemaking, she will be interested in "The girl and her home," by Trilling and Williams, Houghton Mifflin Company. Here the various phases of homemaking are presented as a unified whole and not as separate and isolated units of work.

That adults desire to help in solving personal problems is evidenced by the number of "experts" in various lines of "advice." Granting that the high-school girl also is interested in her personal and social welfare we shall fail in our obligations to her unless we give attention somewhere in a high-school curriculum to this phase of her interests. "Girls and their problems," by Mildred M. Coss, Ginn and Company, publishers, 1931, came as an introduction to the girl herself which has been followed by "The girl today—the woman tomorrow," by Hunter, Allyn and Bacon, publishers, 1932.

As a balance to this personal approach the teacher may feel there is need for serious consideration of family problems. "Managing the home," by Wood, Lindquist and Studley, Houghton Mifflin Company, publishers, places emphasis upon the administrative aspects rather than the special techniques of household activities. It upholds the fact that this job of homemaking is worthy of more recognition due to the exceptional managerial ability and skill required. Along this same trend of thought is "Earning and spending the family income," by Friend, D. Appleton and Company. "Making homes," by Shultz, carries adequate illustrations, problems, and references centered around this phase of home content. Of interest to junior high-school teachers will be the new series announced by D. Appleton, in which Friend and Schultz are co-authors. "Junior home economics," a three-book series,

appears on the Appleton list for January. Another type of presentation of family problems is offered in "The family and its relationships," by Groves, Skinner and Swenson, Lipincott, 1932.

When considering the aesthetic setting for the family, the teacher will find valuable suggestions in "People and art," by Moore, Allyn and Bacon, 1932. Although it is a textbook in art appreciation for the junior high-school age, it can be incorporated into the homemaking course of the junior or senior high school to provide a rich background of art in the home.

For teacher reference, or for more advanced students such books as "Color and line in dress," by Hempstead, Prentice-Hall Company, and "Pattern and dress design," by Eddy and Wiley, Houghton Mifflin Company, will be found valuable contributions to the field.

Since the scope of home economics today has broadened to include every phase of home life with emphasis on attitudes, appreciations, and spiritual values, there is a wide choice of material for the teaching of this broad content. In the words of a prominent educator, "the greatest contribution home economics can make to the development of the American girl and boy is the projection of thought towards future citizenship and a knowledge of the responsibility of every individual to mold the character of our national life through a successful home."

Trends of High School Vocational Agriculture Education

By JULIAN A. MCPHEE, Chief

Bureau of Agriculture Education, State Department of Education

Trends in high-school vocational agricultural education are in direct relation with the state and national economic condition, and demands for this type of work are being brought into the foreground perhaps more forcibly than in any other educational field. The underlying factors for these trends may be briefly summarized as follows:

1. The industrial and commercial centers are over-crowded and there is little or no incentive for the rural youth to look to the urban areas for immediate employment.

2. Heads of families who have lost employment or who have been working on a part-time basis see in farm life at least a living for themselves and their families.

3. There is a definite "stay-on-the-farm movement," and a growing "back-to-the-farm movement." One of the principal hindrances to the latter is a lack of agricultural education for the adult unemployed.

4. Instructors and administrators are concentrating their energy on the phases of agricultural education most closely concerned with earning a living on the farm.

The result of these factors in turn, may be summarized as follows:

1. Because there is no incentive for the farm boy to look to an industrial or commercial vocation or career, enrollment in high-school vocational agriculture has shown a marked increase. However, only 14.5 per cent of the boys now living on farms, between the ages of 14 and 20, are taking high-school agriculture as yet, although most of them will remain on the home farm.

2. There is a marked increase in interest in night-school courses in vocational agriculture, although few classes are

given in the urban areas where the unemployed are congregated. There is also a tendency among boys living in the smaller cities to take vocational-agricultural courses, renting land for project operation.

3. Unemployment relief committees, chamber of commerce groups, and charity workers are virtually agreed that some method must be found to provide agricultural education for city dwellers who want to become farmers or who are being forced to this alternative through economic conditions.

4. Courses in agriculture are being directly connected with the farm problems in each community, with a long-time program of improvement working through the student supervised practice work. Attention is being centered on keeping farm records, efficient farm management and production, and economic marketing methods. Judging competition is being curtailed.

The specific trends in the different regions in California are as follows:

Southern Region.—Enrollment in high-school vocational agricultural education has almost doubled in the last three years, increasing from 611 to 1,192. The average number of students per department has increased from 47.0 to 51.8. No department has discontinued the work. Night-school courses have increased about 33½ per cent. Emphasis on activities of the Future Farmer chapter tending to promote better individual and group leadership and cooperative functions, has increased.

San Joaquin Valley Region.—The enrollment has increased 10 per cent since last year. People are moving to small farms. In one region it was necessary to run an additional bus

through a section of this type of farming, to collect all of the pupils. Dairy and poultry work are gaining favor with the students, while swine production projects have increased more than 100 per cent in the last two years. Smith-Hughes instructors report that the incoming students are of superior quality. Interest in horticulture is declining.

Sacramento Valley Region.—There is a decided tendency to change from specialized farming to diversified or subsistence farming. There is a demand for the type of training which teaches the farmer to do things which he would, in better times, hire done. Old, formerly abandoned farms are filling up with outflow from urban areas. Farmers are depressed over low prices, and must be awakened to the need for education in economics and marketing by the spectacle of other farmers, who have this training, making money in spite of the current situation.

North Coast, South Coast, and Central Regions.—A survey shows that of the students who have had one or more years of

vocational agriculture, 57.3 per cent are farming, 12.8 are in allied agricultural occupations, 6.1 per cent are in college, most of them continuing their agricultural education; 13.5 per cent are in other occupations, 1.6 per cent are deceased and 8.5 per cent are not traceable. Adult farmers are taking more interest in marketing studies. At Tomales High School last summer, for instance, a thorough study was made of the San Francisco milk situation in night-school courses conducted by W. H. Reasoner, agricultural instructor. The study was made by the farmers to determine the advisability of entering this market.

There is a decided demand today throughout California for better-trained farmers. There is little demand for the unskilled youth whose sole asset is muscular energy, or for the agricultural theorist entirely disassociated from the soil. "Learning to do by doing" is a maxim of vocational agriculture, and it is proving itself daily.

Trends of Thought Regarding Continuation Education

Two points of view are to be found in the philosophy of continuation education. These two philosophies result in rather widely different schools, both in enrollment, and in program of studies. On the one hand a director of continuation education may say, "It is my business to do an educational job which is unique—namely, to take young people who are employed and help them to fill their positions more efficiently, or to take young people who want the kind of vocational training offered in our school and prepare them for employment as rapidly as possible. Young people who have problems, other than those of vocational training, should be taken care of in the regular schools of the community." On the other hand a director with another philosophy will say, "The young people who come to register in our continuation school must be served regardless of the problems which they present. It is our job to take every pupil just where we find him and do the best we can for him."

These two points of view are not so far apart as they may seem. Both directors would agree that youth must be served

by the public schools, but one would have the adjustment made in the high schools and the junior high schools, the other would make the continuation school, above all else, an adjustment school.

The two points of view, as expressed by directors of continuation education, were brought out in the program of the Continuation Education Association of Northern California at their winter meeting held in Oakland. With permission of the speakers these two philosophies are presented here to show the two trends in thinking regarding continuation education. The first point of view is presented by Dr. Richard Rutledge, who was last fall made principal of Merritt Business School—a school which has grown out of the Oakland continuation school—in a specially prepared statement of his philosophy of education. The second point of view is presented by A. B. Campbell, who was a year ago appointed to the principalship of the Berkeley Continuation School, now called McKinley High School. His philosophy comes out incidentally in his discussion of the trends in continuation-school enrollment.

Relation of Continuation Education to Secondary Education

By RICHARD E. RUTLEDGE, Principal
Merritt Business School, Oakland, California

In attempting to formulate my views with respect to continuation education, I wish to make it clear that I do not express the policy of the Oakland Board of Education. My own philosophy may be stated somewhat as follows:

The American high school is an institution whose function is to offer genuine, general educational opportunities to all children in the community between the ages of fifteen and eighteen years. Among its objectives, that of socialization is very important. It has a definite responsibility for providing a program suitable to the needs of each boy and girl within its age range who has not definitely decided to enter the ranks of wage earners. The determination to go to work, become self-supporting, marks the transition from the secondary-

school pupil to the adult, whether this decision is made at the age of fifteen or twenty-five. Having reached such a decision, the best education for the person having made it is to earn wages as quickly as possible. If immediate employment is not possible, intensive vocational training, looking toward placement, should be provided. Special vocational schools should be available for this intensive vocational preparatory training and, in addition to the preparatory training, should offer training for the promotion of the employed worker and for the rehabilitation of those who have lost their positions. Such a continuation school would be characterized by the serious vocational purpose of its students. It should not be used as a dumping ground for the mentally retarded or the vicious. It should, however, be willing to assist young people in finding out whether or not they are interested in its vocational training by providing reasonable opportunity for exploration. Its work should be limited to the vocational field and under no circumstances should it be permitted to operate under a policy which would permit it to extend its work to cover all of the

needs of those pupils who are dissatisfied with the traditional high schools of the community.

I think that this brief statement expresses the philosophy of education upon which we are attempting to operate the Merritt Business School. It is quite obvious that we do not consider our school to be a parental school nor a special institution for training persons of low-grade intelligence. I do not mean by the latter statement that there is no place in our program for persons of low-grade intelligence. On the contrary, it is our experience that there are many vocational positions in the commercial field for persons below average mentally, and to the extent that school training can be effectively offered, it is our responsibility to train for these low-level positions as well as for the more highly regarded types of positions, such as secretarial and bookkeeping.

The Depression Affects Continuation-School Enrollment

By A. B. CAMPBELL, Principal
McKinley High School, Berkeley

The attendance of the groups of students at McKinley High School (formerly called Berkeley Continuation School) has been affected in the last few years by the depression, by the compulsory school law, and by certain administrative procedures. There are three classes of students in this school—the compulsory continuation-education group, the adult group taking academic and commercial subjects, and the adult women in extension classes taking dressmaking, millinery, foods, and Americanization. Of the three main groups at this school, only the first group (pupils under 18 years of age) has shown a decrease in enrollment. On the other hand, the enrollment of adults who are taking academic and commercial subjects, has shown an increase of about 50 per cent in 1930–31 over 1929–30, and an increase of the same percentage in 1931–32 over 1930–31. The enrollment of the extension classes for adults has increased by a comparatively small percentage during the past three years, although the general trend is upward.

The enrollment of the group of compulsory students reached its peak in the school year 1924–25 and has since decreased steadily. However, the decrease has been accelerated during the years of the depression. Inasmuch as there are fewer jobs open to minors, more pupils are now remaining in the full-time schools. This tendency to remain in full-time school has been evident during the last eight years in particular, but has been accentuated during the past three years. A further reason for the decrease in the enrollment of pupils under 18 years of age is due to the fact that other secondary schools are now taking care of more of the so called adjustment problems. Until the secondary school, however, is prepared to adjust its program more fully to the needs of the maladjusted pupil, it is the function of our school to continue to serve those who are socially unadjusted as well as those who desire vocational training.

Although there has been a definite downward trend in enrollment of students under 18 years of age, the average daily attendance of this group increased, beginning in the school year 1930–31. The principal reason, of course, was that the Continuation Education Act, requiring a pupil to attend three hours daily if he were not employed, went into effect at that

time. The matter of attendance has been continually stressed through the activities of coordinators and an attendance officer. This also has made for a steady increase in average daily attendance, in spite of the downward trend in enrollment. There was a particularly noticeable upward trend in average daily attendance during the spring semester of 1932, largely due to the inclusion of physical education in the curriculum and the increase in the scarcity of jobs and the attendant increase in the number of pupils required to attend continuation-school classes three hours daily. A further increase in average daily attendance this year is due to the fact that pupils under 18 years of age, who are not employed, are now programmed for attendance in our school four hours daily. It is believed that an increase in the curricula offerings to both boys and girls has tended to make for a greater interest in school, thereby causing an increase in daily attendance and in the number of hours elected by students. During the fall semester of 1932, 25 per cent of the pupils who are employed under work permits attend from two to four hours daily.

The following percentages are quite indicative of the effect of the depression upon the number of minors employed. During the school year 1930–31, 69 per cent of the pupils under 18 years of age had work permits. In 1931–32, 44 per cent of those enrolled had work permits. To the middle of November, 1932, only 26 per cent of the students under 18 had working permits. This tells a story of a steady decline in employment for minors.

As indicated previously, there has been a very decided increase in adult enrollment at McKinley High School since the beginning of the depression in 1929. The increase in the total adult enrollment in 1930–31 over 1929–30 was approximately 25 per cent. The increase in 1931–32 over 1930–31 was about 30 per cent. Although there was a small increase in each of these years over the previous year in the enrollment in extension classes, the principal reason for the large increase in total enrollment was because of the tremendous growth in the number of adults that were concentrated in the academic and commercial classes.

The commercial curriculum at McKinley High School has been greatly enlarged during the past two years and now affords opportunity to many adults, who are unable to obtain work, to secure training which will bring them up to an employment level in the commercial field. Inasmuch as industrial and commercial work demands high-school diplomas of prospective employees, many adults, now out of work, are in attendance at McKinley High School to obtain high-school diplomas. Although a continuation school should not specialize in the academic type of work, it should provide a sufficient amount of academic work to enable adults who would not go to a regular high school to obtain high-school diplomas. In this sense, as well as in other connections already mentioned, the continuation school should become a real opportunity school.

The results of a questionnaire, filled out by the academic and commercial students at McKinley High School, indicate that 70 per cent of this group of students are in attendance to obtain training for future employment, and 10 per cent want to obtain high-school diplomas. The remaining percentage includes students of foreign descent who are in attendance in order to take Americanization courses, and students who wish to develop or maintain certain skills which they have previously acquired. The results of this questionnaire

also show that 70 per cent of the students of the commercial and academic group are women and 30 per cent are men. Eleven per cent of this group are married. Only one per cent of the married students are men. This tends to indicate that a good many married women are seeking training which will enable them to obtain employment and thus help in the maintenance of their families. The age range of this group of 254 students under consideration is from 16 years to 59 years. The period of previous employment of these students was from one to eighteen years. The median is two and one-half years.

This questionnaire shows further that of the 146 students who have worked, only 30 per cent were specially trained for the kind of work they had been doing. This was the case, notwithstanding the fact that 50 per cent of the students who had been employed said they were really trained for some definite kind of work. This would tend to indicate that employment has been so scarce that people have taken positions which were not in line with their previous training. The types of work for which this group of 146 students was trained in the order of frequency is as follows: secretarial, clerical, teaching, industrial, merchandising, and messenger service.

As to the previous training of the group of 254 under consideration, the questionnaire indicates the following: 17 per cent have bachelor's degrees, 13 per cent have had from one to four years of college (median one year), 51 per cent are high-school graduates, 19 per cent have had from one to four years of high-school work (median one and one-half years). In short, 81 per cent of these students who are taking academic and commercial courses are high-school graduates.

From the nature of the enrollment, attendance, unemployment, and courses offered it is apparent that a continuation school should be a real opportunity type of school. It should provide proper opportunity not only for students under 18 years of age, but also for those adults who are temporarily unemployed or unadjusted socially or economically. Then the continuation school will meet the needs which society really demands of it.

Twelve Points for Continuation Education

By F. C. WEBER, Supervisor

Continuation Day Classes, Metropolitan Continuation School
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Throughout history each movement affecting the social structure has had its leader—the man who saw the need—the mind that envisioned and explained and drew to the cause the nucleus of workers. The workers became the leaven which permeated and modified the social order.

Dr. E. R. Snyder saw the vision of a richer, fuller, more useful life for the junior workers of California. He started the movement. The continuation-school teachers of the state are the leaven. And, during the twelve years that this work has been going on, marked changes in the thinking and attitude of the educators of the state have been taking place. What has been found to be fundamental and sound in continuation education? What are the aims of continuation education? The writer believes that the following twelve points are a partial answer to these questions:

1. Continuation education has transferred the teaching emphasis from subject matter to the student. The individual has become more important than the subject.

2. Continuation-education practices have abandoned the mere accumulation of knowledge for the stimulation of the student's thinking.

3. Continuation education has deserted a prescribed course of study for a series of mental experiences consistent with the daily personal experiences of the student.

4. Continuation education not only measures and interprets the student by his ability to recite, but also it takes into consideration his home, family, associates, and neighborhood surroundings, as well as his personal needs and ability.

5. Continuation education receives students and deals with them not as groups, but as individual members of society worthy of consideration.

6. Continuation education sets up only such levels of attainment as are appropriate and possible under the circumstances of ability and environment. It never labels a student as a failure.

7. Continuation education is based upon friendship between student and instructor through which they become co-workers in a common cause.

8. Continuation education and junior-worker experiences replace restraint by responsibility. The junior worker is a producer in industry responsible for quality and quantity, a self-supporting, self-respecting member of society.

9. The continuation school recognizes the dignity of the junior worker and cooperates in planning for his future.

10. Continuation education replaces the demand for obedience by an understanding cooperation.

11. Continuation education recognizes the basic fact that attitude toward life is more important than technical knowledge.

12. Continuation education gives to the student who has become confused and unhappy in his school relationships a new deal.

That the above ideals and practices have functioned in thousands of young workers' lives in California is not doubted by those who have, to any extent, thoughtfully observed the working out of the continuation education law. It has aided these junior workers in finding themselves vocationally and socially. It has increased their effectiveness both spiritually and materially. They deserve this help. It is a most profitable social investment which returns generous dividends of manhood and womanhood. Surely its influence upon tens of thousands of young people should not be sacrificed to false notions of money economy. They are costing much less than if they were in the full-time schools. They are helping support families, thus cutting down the demands upon charity. They are entitled to sympathy, understanding, and help from our public schools.

FROM MINNEAPOLIS

President Morgan, of Antioch College, in his address before the National Vocational Guidance Association at Minneapolis, last month made the following significant statements:

"America's ideal has always been in terms of well-being for the many—it is her contribution to history.

"Those in authority, financiers, business leaders, etc., are challenging the idea of equal opportunity for all.

"Vocational education and guidance more than ever are the responsibility of public education.

"Profit-mindedness must give way to social-mindedness."

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